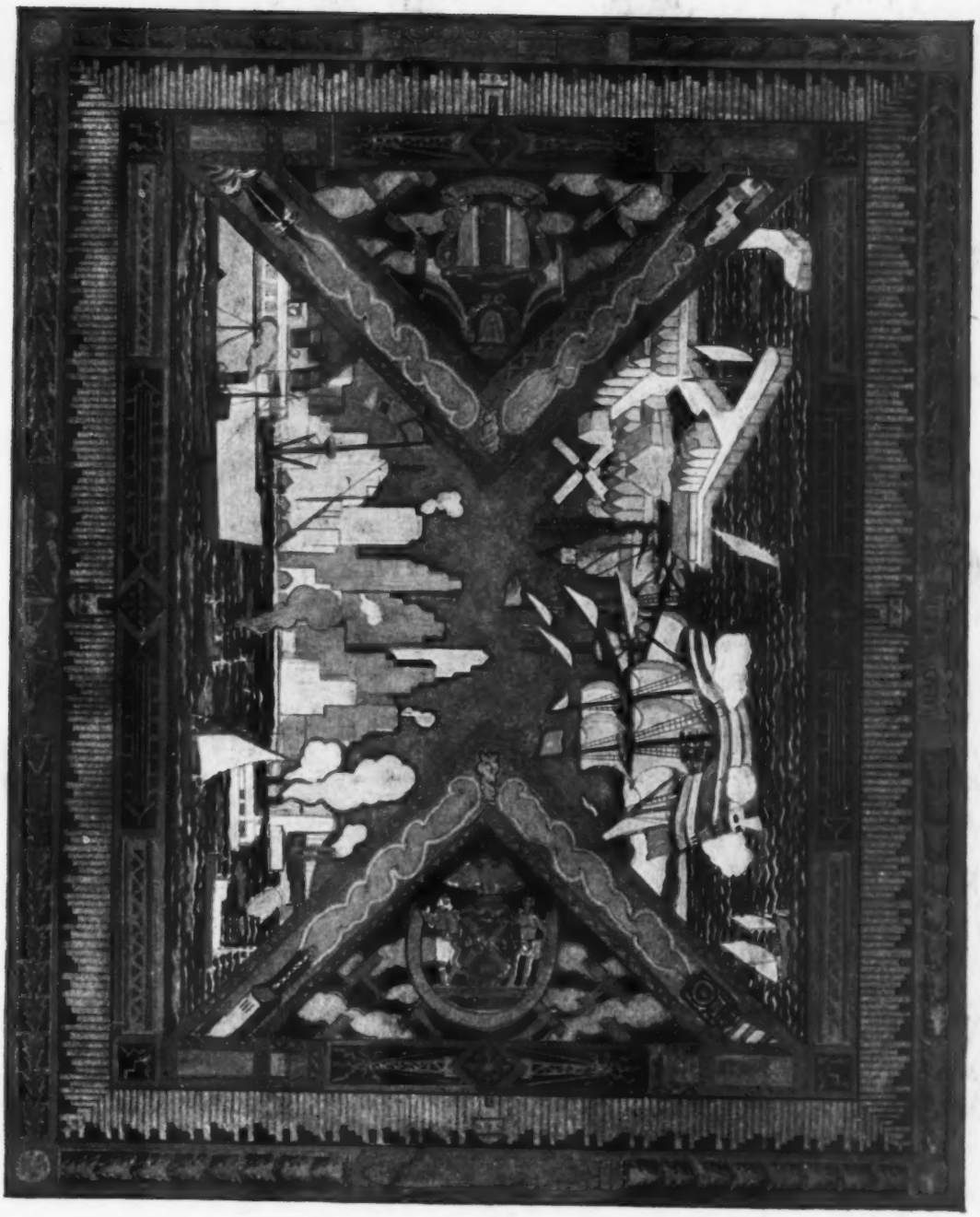
Art Division

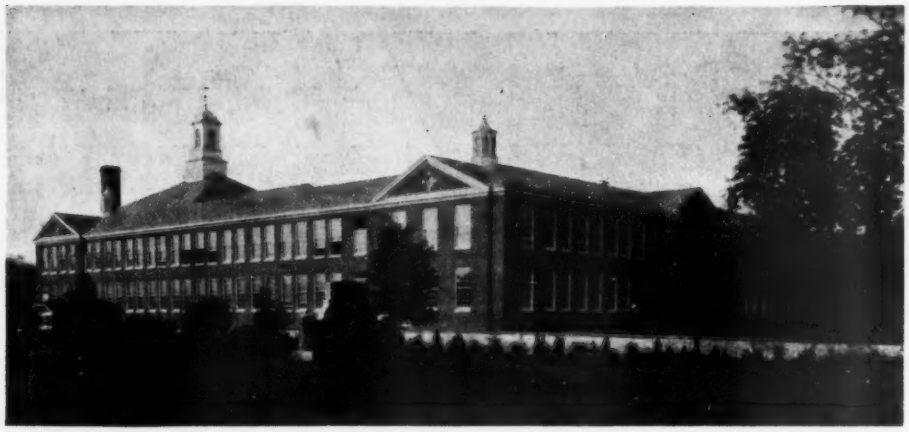


THE AMERICAN ARCHITECT

· FOUNDED 1876 ·

August 1930

XUM



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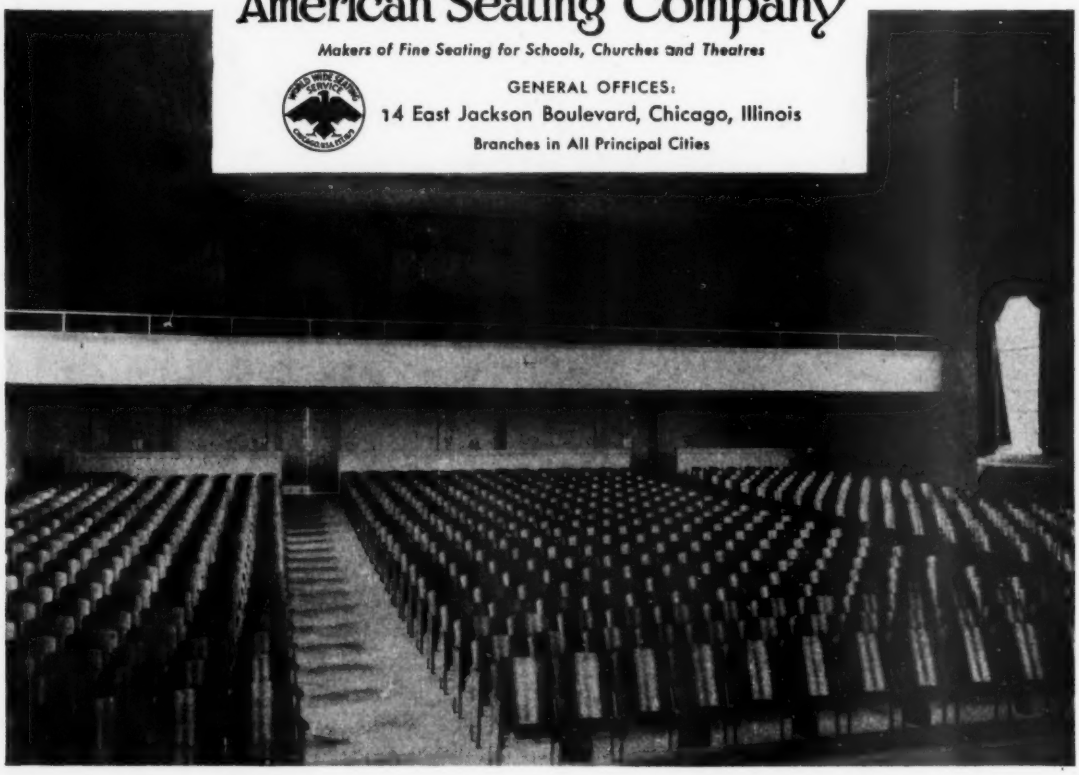
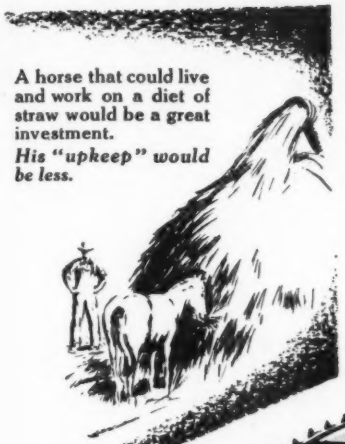


KEWANEE STEEL BOILERS



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RAYMOND

557

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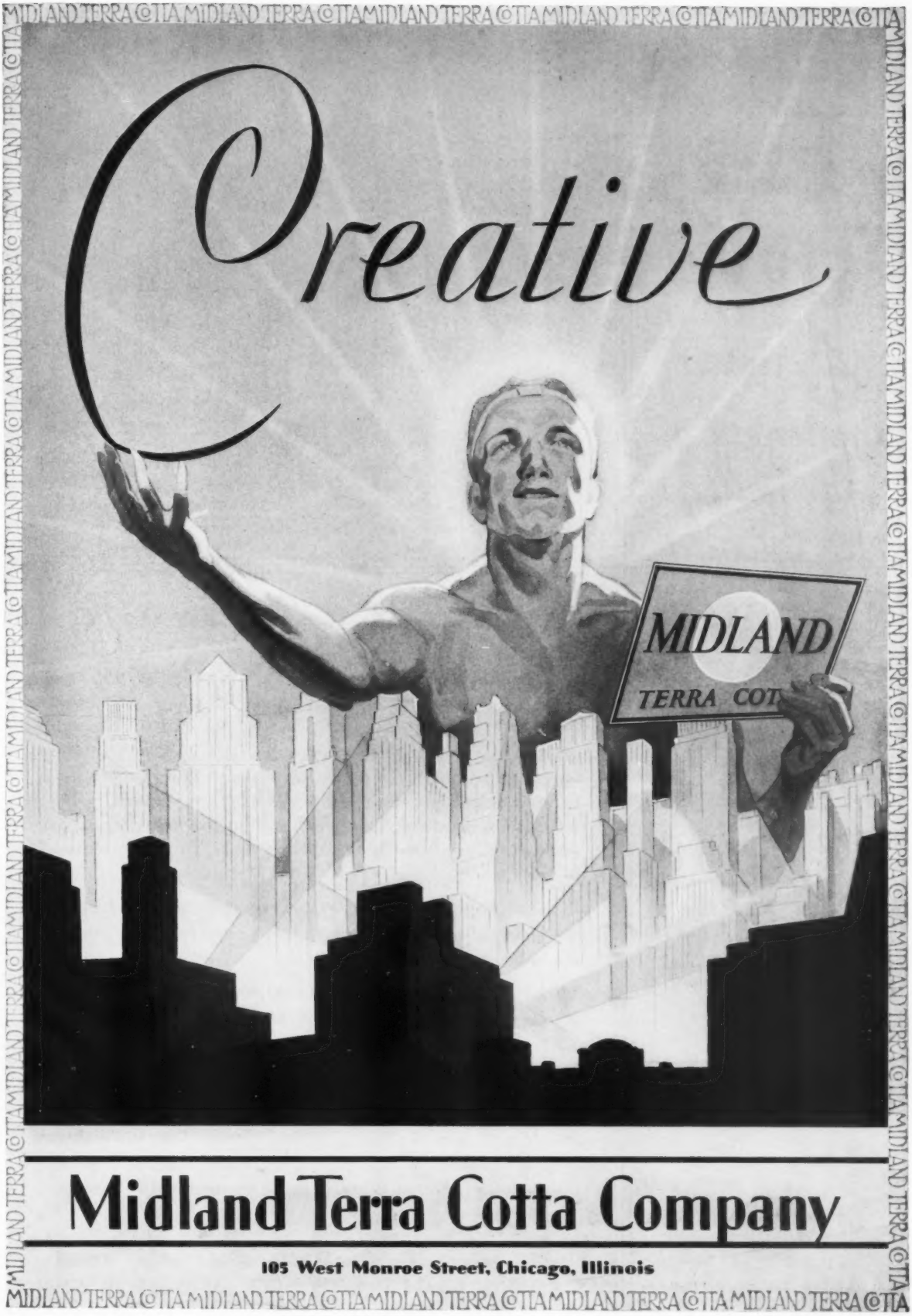
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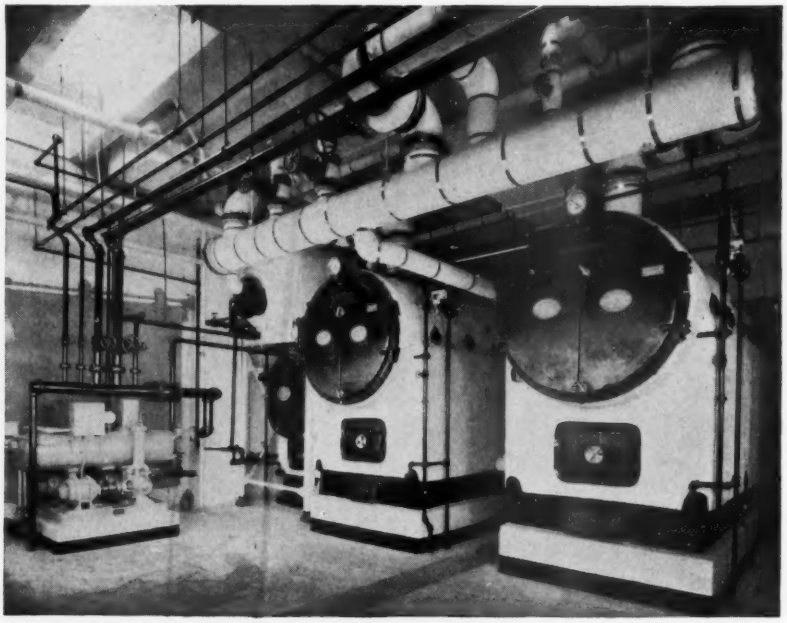

The Richfield Oil Company Building, outstanding new Los Angeles business structure, is heated by three Pacific Welded Steel Boilers burning oil. Architects, Morgan, Walls & Clements. Mechanical Engineer, Ralph E. Phillips. Heating Contractor, Thomas Haverty.

The Pacific Welded Steel Boiler oil fired heating installation in the Richfield building. This consists of one 5290 and two 15300 boilers. Pacifics can be used with any type of oil burning equipment. The change from coal to oil or vice-versa requires but a few hours' time.

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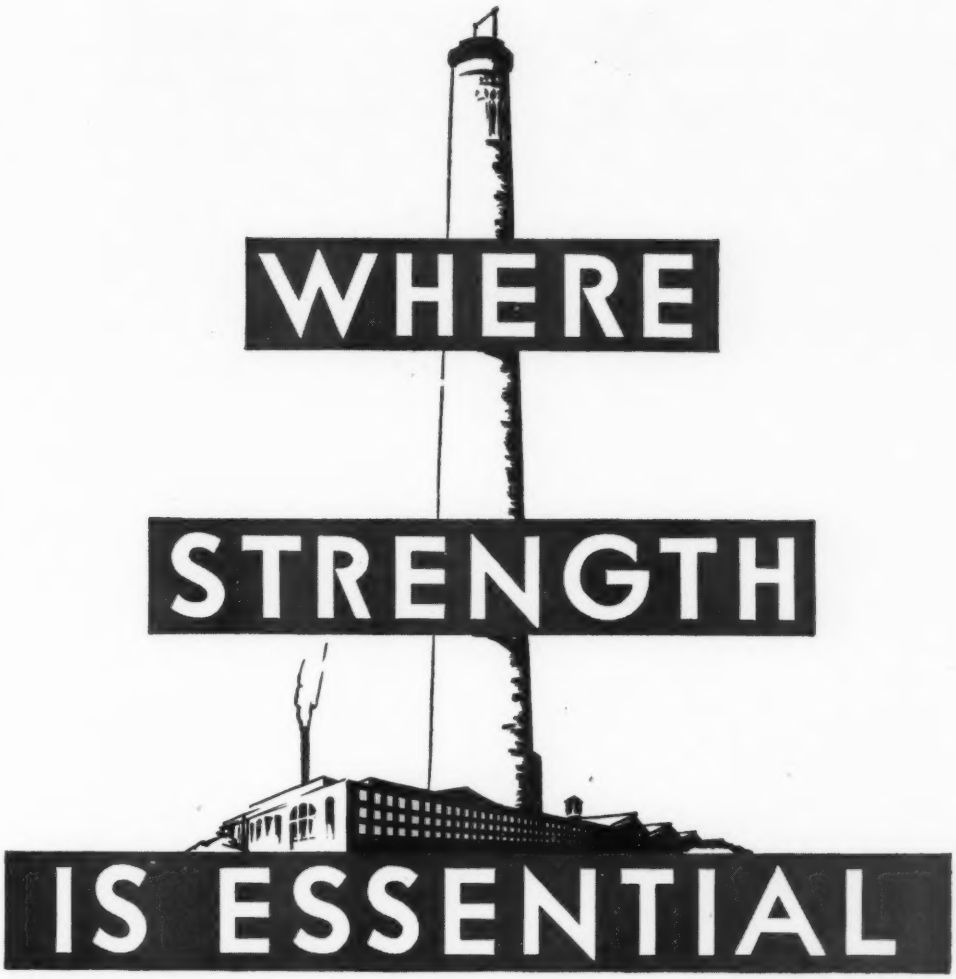

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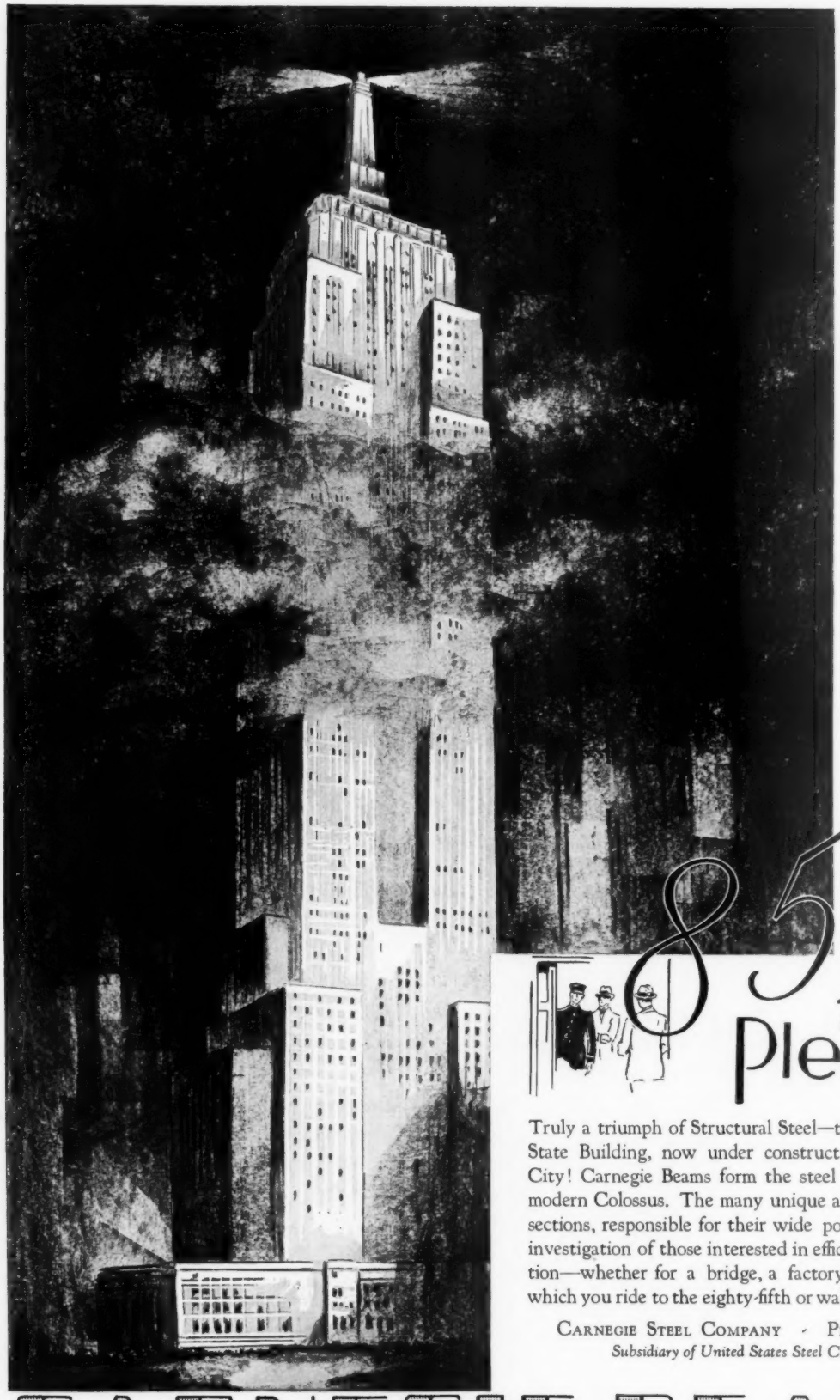

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CARNEGIE BEAMS

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the Cork Decorated Office

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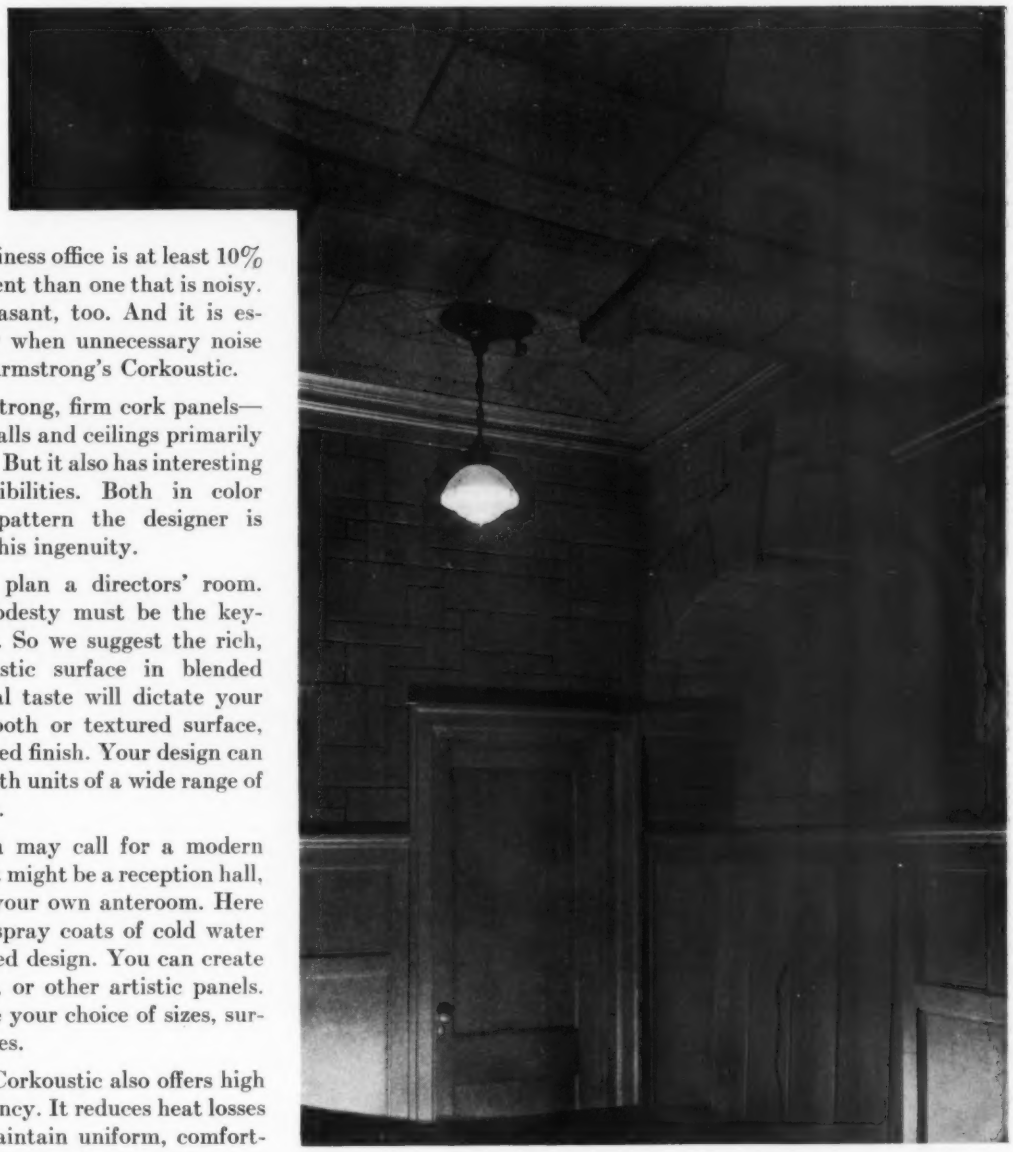

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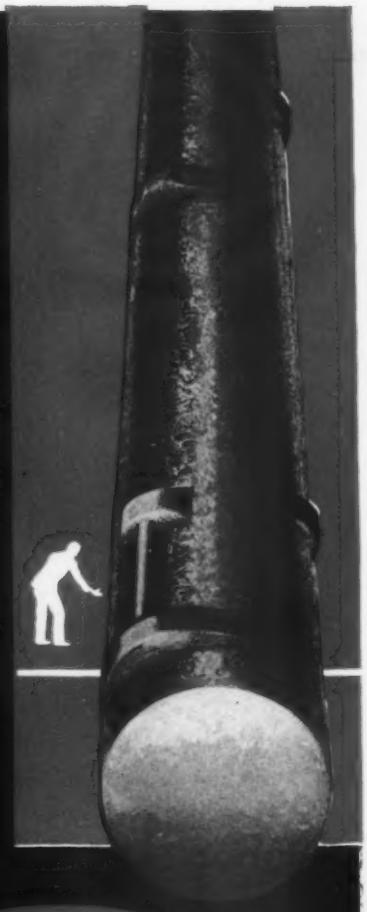

RAIL STEEL
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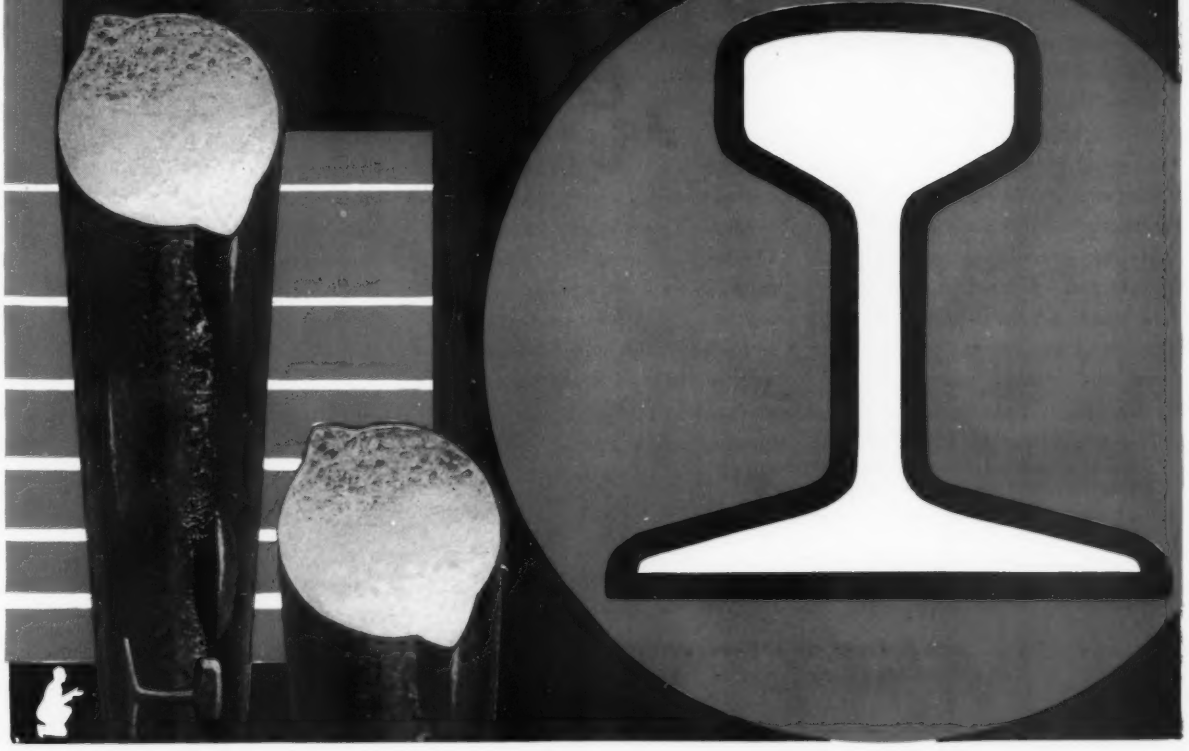

STUDIES IN TECHNICAL CO-OPERATION

FORESIGHT IN WIRING AND LIGHTING PRACTICE *helps to keep schools modern*

by RUSSELL G. HOWARD, *A. I. A., Registered Architect, Dubois, Penna.*

In the Ramsey High School at Mount Pleasant, Penna., thought for the future has been taken in every step of the wiring and lighting installation.

THE high school building that is to stay modern must be able to keep pace with the steady increase in the use of electricity called for by the specialized and vocational type of training that high schools provide today.

In the design of the Ramsey High School at Mount Pleasant, Penna., it was apparent that this trend raised special wiring and lighting problems. Electricity must be made available for light—for power—for special heating applications. Extra-curricular activities could not be forgotten, for the high school has become a center for social and athletic affairs that call for specialized lighting applications.

The recognition of a need for a practical basis by which to measure and provide for this increased use of electricity led to contact with the lighting and wiring service department, a non-commercial section of the local electric company. Here was found a thoroughly practical knowledge of the factors to be considered in avoiding an inadequate wiring installation and a broad perspective on which to base predictions of future requirements. The help and advice it furnished resulted in an electrical layout providing two circuits for each classroom, with a spare circuit for each five active circuits. No wire smaller than No. 12 was used and in every case the wire specified makes possible an increased use of light. In addition to the usual type of lighting in the gymnasium and auditorium, wiring for decorative lighting is provided, together with complete stage lighting equipment. All entrances are wired for flood lighting.

Wiring for purposes other than lighting is unusually complete, including heavy-duty convenience outlets for classrooms, lecture rooms and halls. There are motorized manual training rooms, and wiring for a public address and radio system, for television and for electric clocks.

It is not enough that buildings erected today be suitable only to today's conditions. They must be adaptable to developments of the kind that are typified in the ever increasing use of electricity.

For information about trends in lighting standards and about adequate wiring, call on the wiring bureau of your local electrical service company or write direct.

NATIONAL ELECTRIC LIGHT ASSOCIATION, 420 LEXINGTON AVENUE, NEW YORK

Shell Building, San Francisco

Framework of Bethlehem Wide-Flange Structural Shapes

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Architects: Bennett & Haskell
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Volume CXXXVIII
Number 2586

The AMERICAN ARCHITECT

AUGUST
1930

FOUNDED 1876

The Cover

SYMBOLIC of the progress of New York City is the ceiling mural in the lobby of 120 Wall Street, a building erected on the site of Murray's Wharf where George Washington landed to take the oath of office as first president of the United States.

The mural represents the skyline of old New Amsterdam and present New York. In one triangle is the seal of New Amsterdam; in the other, that of New York. The silver border is a conventionalized stockade; the outer border containing pine trees symbolizes Pine Street, on which one side of the building faces. The details of the pattern throughout the mural are a conventionalized contrasting of motifs representative of the old and new in New York.

D. Putnam Brinley, A.N.A., A.A.A. painter of the mural, received honorable mention from the Architectural League of New York, 1930, for his mural decoration in the Brooklyn Savings Bank, New York, entitled "Brooklyn—Past, Present and Future." He is second vice-president of the National Society of Mural Painters, and has painted many fine murals.

Next Month

CHRYSLER BUILDING—How the world's tallest building impresses a leading New York architect.

METALS—An architect turned metal worker tells how to design in bronze.

SUPERVISION—What to watch for in supervising brick work.

CONTRACTS—Clinton H. Blake presents a new and improved form of contract likely to reduce disputes.

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ERNEST EBERHARD, *Managing Editor* HARRY F. CAHILL, *Advertising Manager*
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XUM

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THE distinctive rounded top (*patent applied for*) of the Heggie-Simplex Jacketed Boiler appeals instantly to housewives. It eliminates from the basement another place where debris may accumulate. Also it does not collect dust as easily as a flat top.

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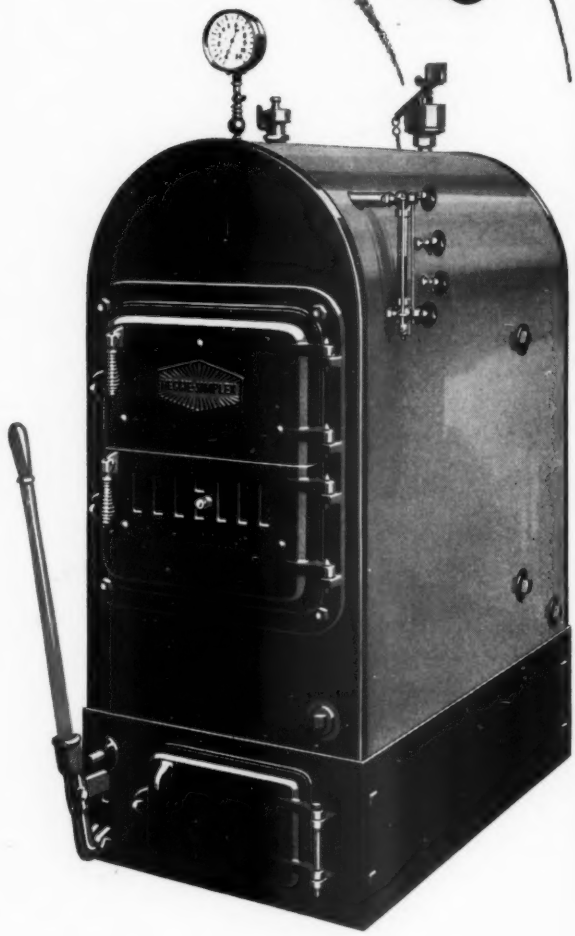
Standard Heggie-Simplex features of design* assure the same continuous economical performance that only the owners of large buildings using large steel boilers could heretofore obtain.

For details write Heggie-Simplex Boiler Co., Joliet, Ill.
MEMBER OF THE STEEL HEATING BOILER INSTITUTE



*The spacious combustion chamber in the Heggie-Simplex Jacketed Boiler gives fuel more room to burn. Heating surface in direct contact with the fire on all sides absorbs the heat the instant released. Numerous tubular flues, unrestricted circulation and the jacket's *mineral wool* lining assure complete utilization of heat units. Of welded steel construction, the Heggie-Simplex is crack-proof and leak-proof, assuring freedom from breakdowns.

HEGGIE-SIMPLEX
STEEL HEATING BOILERS

Have you ever saved a client money?

By BENJAMIN F. BETTS, A.I.A.

A MANUFACTURER in Buffalo, New York, required a new factory building. Unfamiliar with architectural service he obtained, without plans, an estimate from a contractor. He then decided that he should have competitive bids. The contractor recommended that an architect be engaged. This was done. The factory was built. The owner obtained a building designed by a planning specialist, planned for future expansion, and of more substantial construction than the contractor had originally estimated. The total cost was several thousand dollars less than the contractor's original price. The employment of an architect saved this manufacturer money and he will not build in the future without seeking expert building advice.

In the experience of architects throughout the United States, there are many interesting occurrences, both commonplace and unusual, that are convincing evidence of the value of architectural service. Actual cases such as that cited above have more weight with the building public than all the arguments and abstract statements that can be made on the subjects of planning, beauty, and fitting a building to its site.

The question of properly designed buildings can be safely left in the hands of capable architects providing they are given the opportunity. Savings to the advantage of a client can be accomplished in many different ways, and the man in the street needs to be convinced of this fact.

THIS can be accomplished by compiling a large number of cases demonstrating that architects have saved and can save money for their clients. THE AMERICAN ARCHITECT will publish such cases in book form providing architects will lend their support to the movement by forwarding the required information. Until a sufficient number of these cases have been received to make a booklet feasible, these experiences will be published within the pages of this magazine. Later, the booklet will be made available to architects everywhere for distribution to prospective clients and others who may be interested.

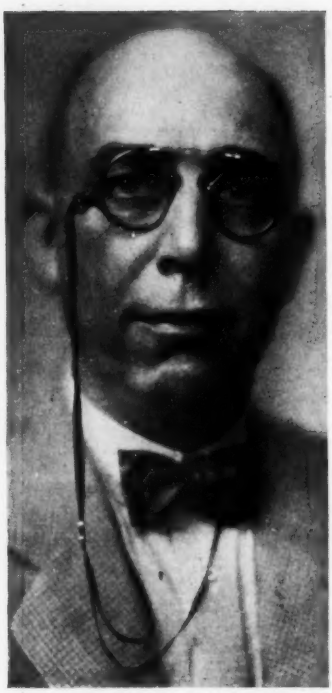
Architects who have had personal experiences that demonstrate the financial value of their services to their clients are requested to promptly forward the facts to the Editorial Department of THE AMERICAN ARCHITECT. Describe the case briefly but clearly and state whether your name and the client's name may be published.

TWO MURALS . . . .

Cypresses, festooned with Spanish moss, silhouetted against a sunny sky, with bulky footings like a mushroomed column. A photographic study by John Kabel suggestive of a mural which seeks to capture the romance of the tropics

Painted by NATURE

Palms that face the setting sun with the placid tranquillity so typical of the tropics. John Kabel, in this photographic study, has caught the colorful glory and presented it in black and white with but little loss of splendor



HARRIS & EWING

THE TENNESSEE CHAPTER A.I.A.

employs an Advertising Agency

By MAX H. FURBRINGER

Chairman Publicity Committee, Tennessee Chapter A.I.A.

WHEN the manufacturer of a well known automobile decided to change the model of his cars he justified this expensive procedure by the statement that conditions change over a period of twenty-five years. Yet we, engaged in a profession intimately concerned with contemporary life, are seemingly content to continue in the same fashion because we cannot, or will not, recognize the changes which are taking place on the business side of architectural practice with such rapidity that it staggers the imagination of even those endowed with more than the average amount of vision.

No profession has made greater sacrifices in a sincere effort to maintain the dignity essential to command the respect and confidence of the public. Unselfish devotion to the highest ideals of professional practice has, in a large measure, entrenched us in the position we occupy in the minds of those who are fair and just At this late day no act of ours should jeopardize the advantage gained, but on the other hand neither should we shackle ourselves with traditions of a bygone age and refuse to open your eyes to the changes which modern methods and conditions have brought into being and become obsolete, as we surely will, if we deny that the business side of the practice of architecture demands a different outlook if progress is to be maintained. We certainly cannot surrender without some show of resistance the advantages which we have earned through the efforts of ourselves and of those who have preceded us, nor can we stand idly by and observe the slow but steady encroachment of other agents into the field we have a right to regard as our own. In a measure this is just the condition we are drifting toward if we refuse to take stock of ourselves, honestly diagnose our case, and act before the flood gates have burst asunder and overwhelmed us.

Such thoughts as these are responsible for the action taken by the Publicity Committee of the Tennessee Chapter, A. I. A., in developing plans for the purpose of acquainting the public with the duties and responsibilities of an architect. To bring this message to the attention of the lay public is the object of the Committee. For this purpose we are raising a fund of $10,000.00 among our chapter members and those of allied interests who agree that the employment of an architect is essential to the healthful and economical progress of the construction industry.

To secure the greatest benefits of the funds which have been and are being subscribed to this undertaking, we have sought and obtained the advice and counsel of an advertising agency well known and established in this vicinity. Any publicity undertaken will be made under its guidance and direction, for we certainly have no basis for criticizing anyone for attempting to build without the services of an architect, if we, on the other hand, will attempt to undertake something for which we have not been trained. Our architectural periodicals are of priceless value to the members of the profession; as a means of reaching the public with a message, their worth is questionable. Yet we spend time and effort telling each other through the columns of these journals why an architect should be employed and this in spite of the fact, which is well known to us all, that but few

"We must adjust our practice to conditions

ADVERTISING of the Tennessee Chapter IS INTENDED TO...

. . . 1 . . . *Interpret the profession of architecture to the man in the street*

. . . 2 . . . *Inform the public that stock plan services follow the sound merchandising principle of being worth no more than they sell for*

. . . 3 . . . *Make clear that material dealers, contractors, engineers or other sellers of materials or erecting service, do not render complete architectural service because of the very nature of their business*

. . . 4 . . . *Emphasize that the employment of a capable architect is the best guarantee of a well planned, efficient and economical building*

except architects and draftsmen read or see any of the leading architectural magazines. Even the popular periodicals have, it seems to us, but limited value in the advertising field in comparison with the daily newspapers. It is largely through this latter agency that we expect to reach the public by paid advertising and by well written and interesting articles which we expect will have sufficient merit to impress upon readers the position occupied by the architectural profession in our complex civilization of today. No single avenue of publicity will lead to the goal for which we are striving. For this reason we will also employ direct mail, selecting such concerns as mortgage and loan companies, bankers and investment houses, state and municipal officers, boards of education, etc. At stated periods we will send pamphlets to these to direct their attention to the value of architectural services in connection with building operations coming under their direction and control.

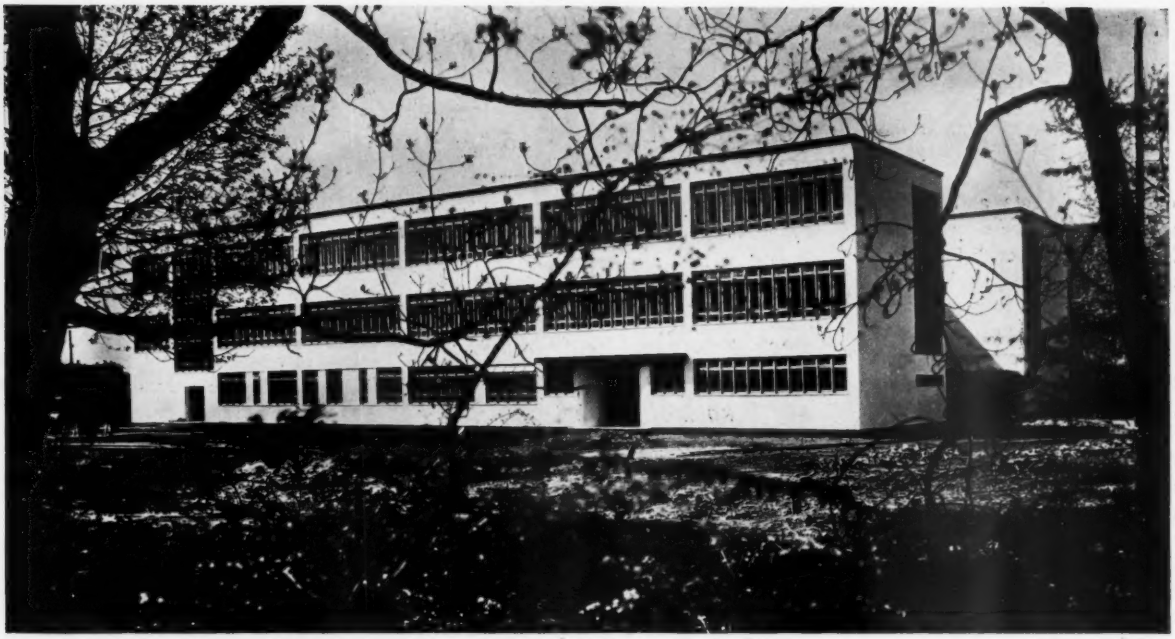
SHOULD this undertaking develop to the extent we expect it will, it is our intention to extend it over a five year period. Our plans at present contemplate an active campaign of twelve months which, however, will take perhaps sixteen months to unfold as we will eliminate the summer months, when the people we wish to reach are on their vacations, and the holiday season, when publicity of the kind we are engaged in will receive but limited consideration. It is our hope and purpose to have other chapters in the South join us in this undertaking in order to extend, as far as possible, the benefits to be derived from the efforts expended and likewise to reduce the per capita cost to each chapter. Should we not be able to convince the chapters in this vicinity of the value of this campaign we will, nevertheless, proceed along the lines as suggested, confident that after a brief trial the wisdom of cooperation in a venture of this kind will convince everyone of the benefits to be gained by concerted action.

It must be apparent to those who are not entirely oblivious to the changes which have, and are, taking place in our midst that we must adjust our practice to conditions as they exist if we expect to maintain the position we have inherited through the zeal and enthusiasm of that group of practitioners who gave so largely and liberally of their talents, and whose unselfish devotion to their ideals we cherish as our greatest heritage. But we, too, owe something to those who are to follow in our footsteps, and in a measure we can even claim that we have some rights ourselves. Unless steps are taken to protect our interests they will be absorbed by others with a keener vision if we continue to assume an indifferent attitude. Frank discussions are vital to the progress of any industry or profession if they lead to action, as they invariably do, but to procrastinate only postpones the realization of the ends sought. This is the motive which has brought the members of the Tennessee Chapter into action and crystallized into being the plans developed for an active publicity campaign having as its objective the education of the laymen as to the services rendered by architects; the proper charges for the duties performed; the responsibilities assumed and the skill required to undertake the complicated and exacting demands which are so little understood outside the realm of the profession itself.

Serious and mature consideration was given to any action the Institute might take in developing a nation-wide campaign of publicity. Full recognition was taken of the unselfish plan as proposed by one of our architectural periodicals to accomplish the ends we expect to gain. We believe we are right in assuming that as a Chapter of the Institute, representing as we do the Institute in our vicinity, we can in a measure accomplish more by directing a campaign of our own than we could with reason expect that the Institute could do for us, while on the other hand an architectural periodical, even with the most generous assistance of a large percentage of architects, could hardly expect to direct and finance an undertaking and obtain the results which are sure to follow when a group of enthusiastic members sponsor in their own vicinity a plan such as I have outlined above. However, we neither discount nor discourage any activity along these same lines by any other agency, knowing and realizing that there is much to be done before anything will be gained, but it does seem to us that the various chapters must in the end assume the burden of correcting and improving conditions surrounding the practice of architecture in their respective locations. (*Continued on page* 106)

as they exist . . . or become obsolete"

XUM



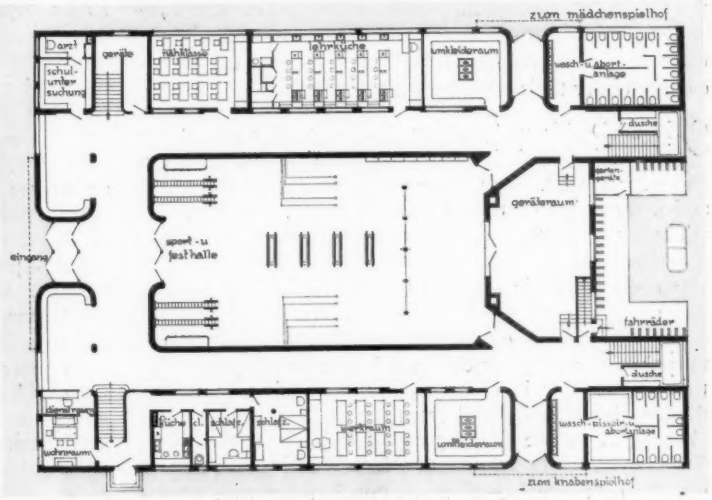
Practical necessity has produced an example of form following function

A German Public School at Celle

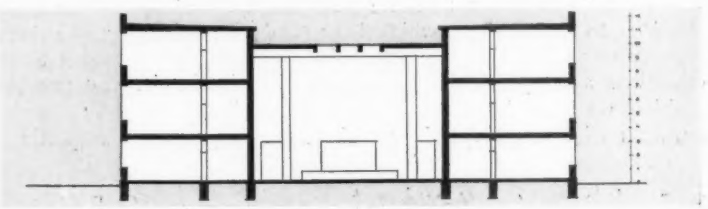
OTTO HAESLER
Architect

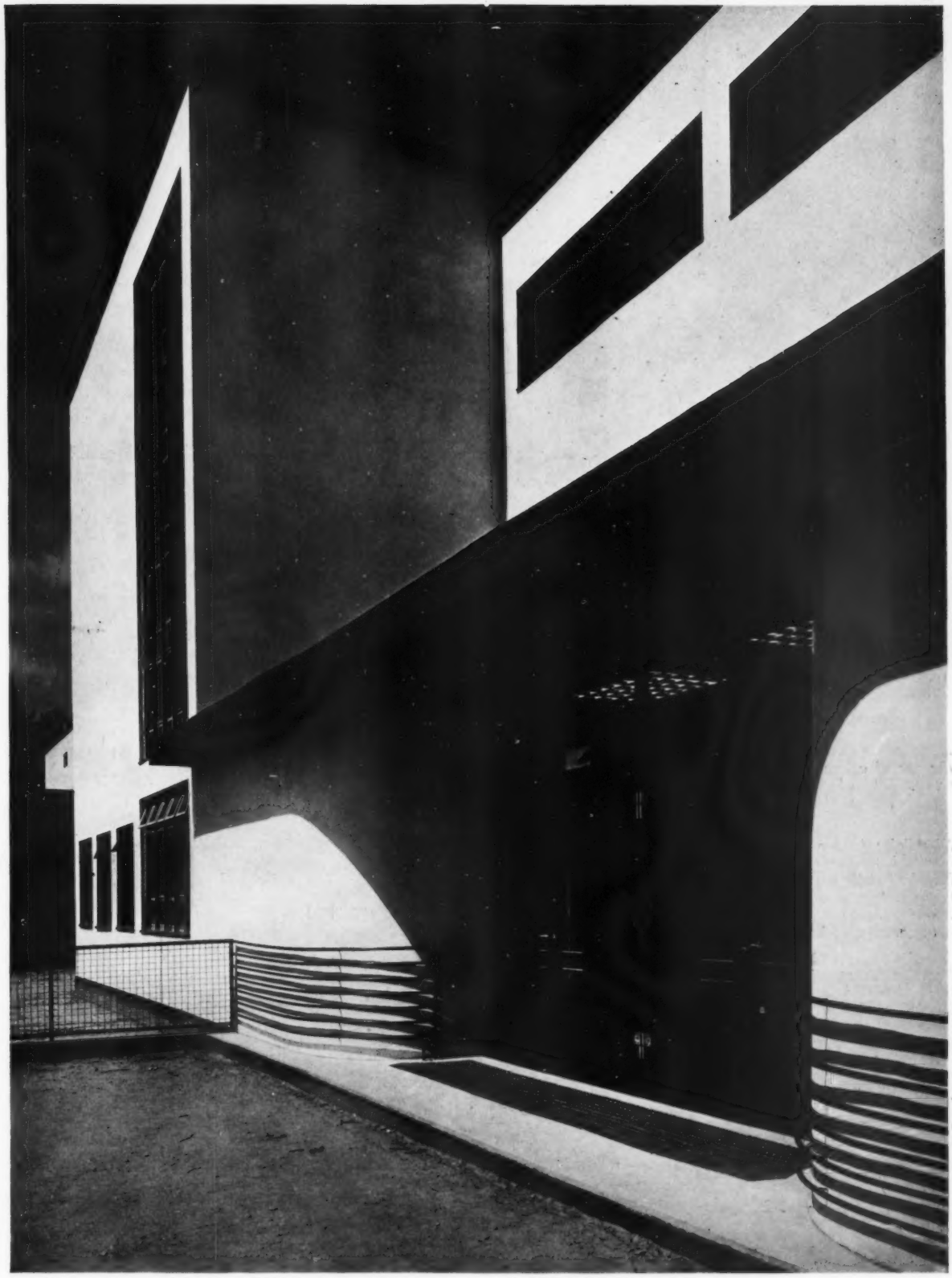
•

REFLECTING TODAY'S ECONOMIC CONDITIONS

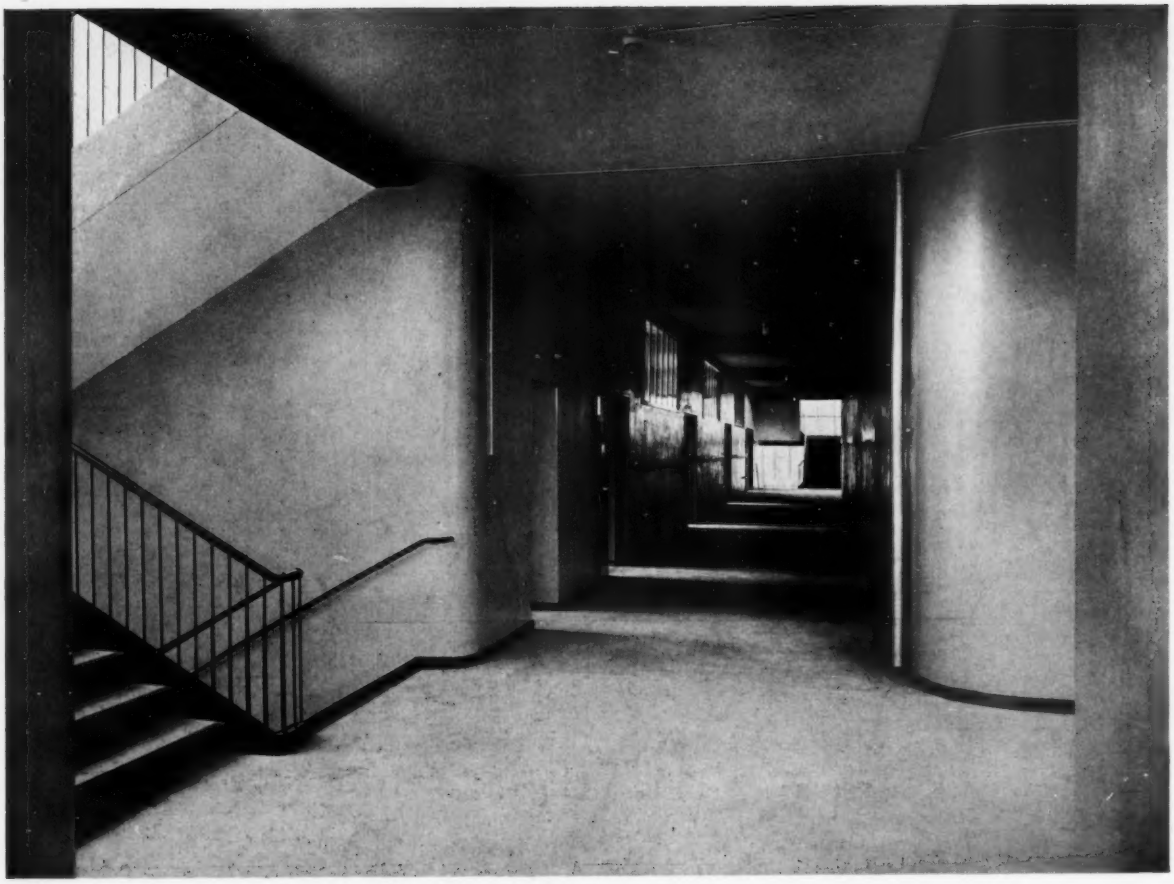


Laboratories, toilet rooms, offices and gymnasium are on the ground floor. Class rooms are arranged on the upper floors. The transverse section indicates a building of utmost structural simplicity





Superfluous ornamentation is absent even from the principal entrance. The problem has been solved in a thoroughly practical manner, but reduced to essentials



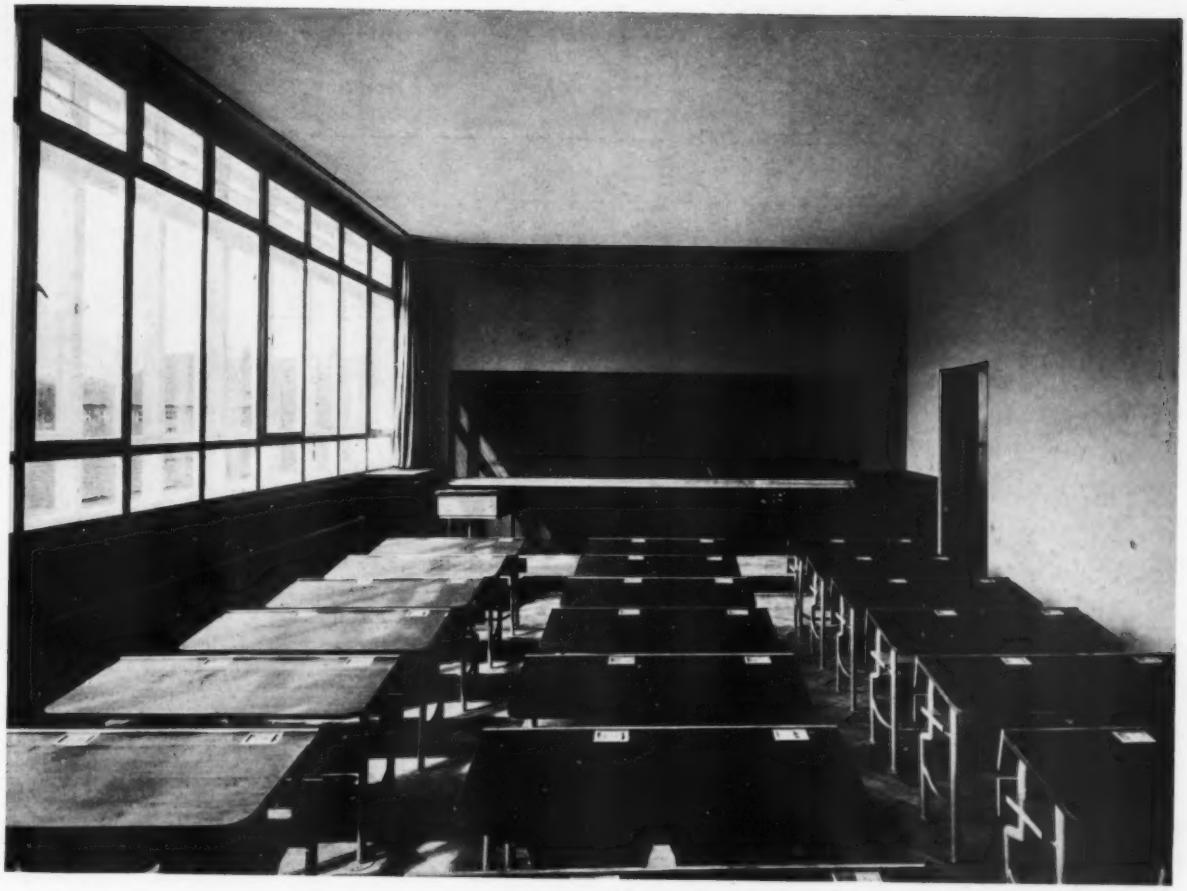
Economic considerations are evident in the use of a low base at the corridor walls, exposed electric conduit, and design of the stairway

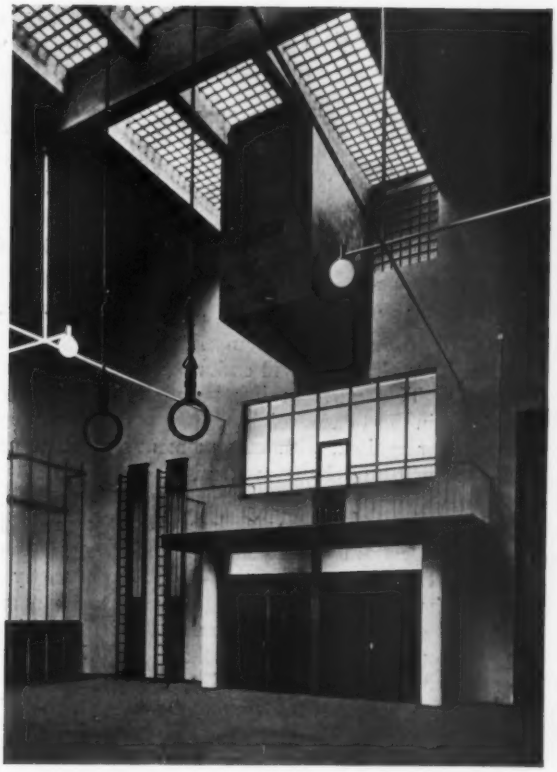
Simplicity in the class rooms, while born of economic necessity, has not impaired their usefulness and perhaps revives the question of whether a school room should be simple and severe or homelike in its decoration

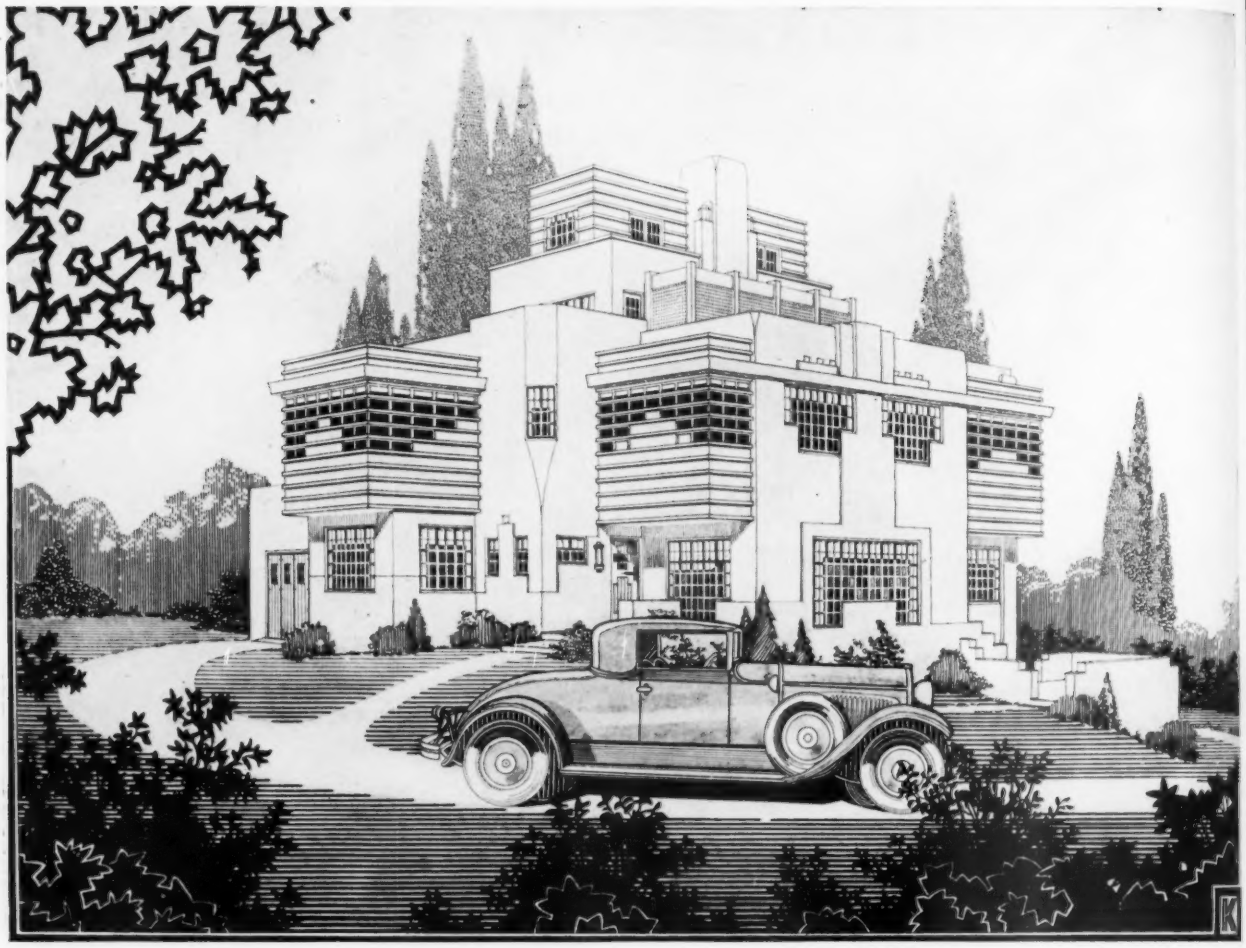
Practical, substantial school room furniture has been achieved at little cost. The teacher's desk is in harmony with other furniture used in the class rooms. Note the use of welding for joints of both furniture and radiators

The gymnasium is equipped with a projection booth and stage to permit of its also being used as an auditorium

A GERMAN PUBLIC SCHOOL







A HOUSE DESIGNED IN THE MODERN MANNER

By Gerald Lynton Kaufman, A.I.A

IS the so-called "modernism" a mere architectural fad, destined to disappear within a few years, or it is a bona-fide style which will endure and mature through the ages? This question has been all too frequently asked, and in most cases too hurriedly answered by those either for or against, without a moment's pause to analyze the meaning of the term itself.

From the Age of Pericles when Phidias was a "modern," up to our own lifetime when the modernist Gothic of Bertram Goodhue came into vogue, every new departure in architectural design could aptly be termed "the modern manner." When stockings and skirts replaced sandals and robes, there is little doubt that the younger generation of the Dark Ages was as severely criticized for the sin of modernism as are our college sorority girls of to-day, on advocating a reversion to Greek customs.

Recognizing, then, that the word "modernism" is only a fleeting term used temporarily for each new style as it appears, let us then grant that it has a certain significance to-day through its use to differentiate forms which have grown from the Mechanistic Age, from those of tradition . . . remembering, however, that this, too, is a temporary term, and the Age of Mechanism may shortly be called the Age of Jazz, or the Age of Material Logic.

We are not seeking terms, however, in thus playing with our word "modern"; we are seeking to learn what there is in this style, which may endure. For art alone does not endure; art requires a *raison d'être,* and the art of architecture requires logic as well.

With logic for our foundation, let us then examine the so-called "modern manner," and see how firmly it is built up upon this base. Are we not struck immediately with the realization of a great inconsistency? Has the "modern manner" not failed so far, in that it seems concerned with interiors and furniture only, with little or

why you may or may not
LIKE THIS HOUSE

The Affirmative . . . . . The Negative

1. PLAN

(a) Logical and efficient solution of modern living requirements.
(b) Each room planned to fit layout of furniture and equipment.
(c) Comfort and convenience given first consideration in plan.

(a) Too much logic and efficiency add to materialism of our lives.
(b) Built-in furniture and equipment precludes later re-arrangement.
(c) Added number of corners and alcoves increases cost of building.

2. THE EXTERIOR

(a) Full use of modern materials and methods of construction.
(b) Gain in terrace and porch space through use of flat roofs.
(c) Simplicity of forms and masses, and elimination of fuss and frills.

(a) Abandonment of the romantic appeal of traditional styles.
(b) Necessity for snow removal on terraces and flat roofs.
(c) Overemphasis of the practical eliminates aesthetic appeal.

3. ECONOMIC CONSIDERATIONS

(a) Modern plumbing, heating, and equipment demand expression in plan.
(b) Straight-forward roof framing reduces construction cost.
(c) Elimination of waste gives 100% usage to entire house.

(a) Ever-increasing percentage of cost going into mechanical installations.
(b) Flat roofs require flushing and insulation more than other types.
(c) So-called waste space has certain economic or romantic value.

4. GENERAL CONSIDERATIONS

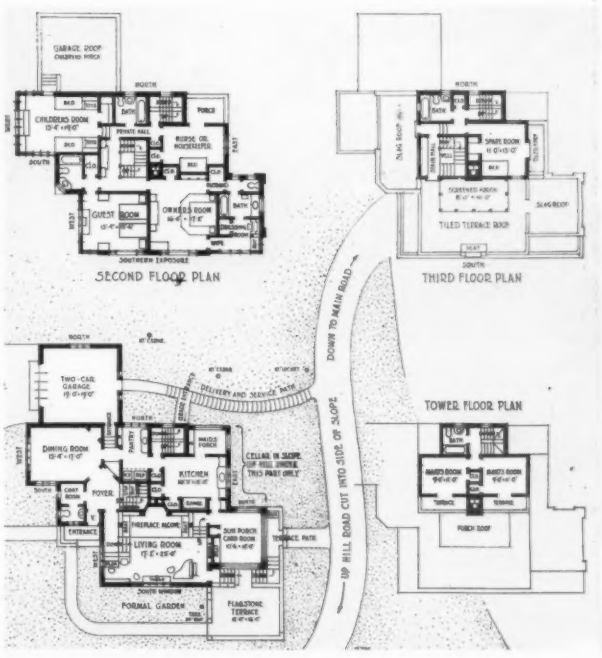
(a) Logical arguments that have developed auto and aeroplane vehicles of today.
(b) Pioneer's desire to give expression to 20th Century American living.
(c) End of inconsistency of modern furniture in old-style homes.

(a) Romantic arguments for Old-World picturesqueness of one-horse shay.
(b) Pioneer's risk of adopting a fad here to-day and gone to-morrow.
(c) Difficulty of finding use for fine antiques and family heirlooms.

no thought given to the problems of modern planning and the design of the modern facade? Have we not neglected to study the possibilities for beauty and simplicity in the treatment of residential exteriors, in thus leaving all modernism to the decorators?

In the up-to-date apartment, however badly its flat, fifteen-story, street facade may have been designed by the architectural factory which fabricated it, there is at least some logical justification for modern interiors. The building is one of elevators and steel, of speed, mechanism and efficiency. Insofar as a modern interior expresses these without sacrificing either beauty or comfort, it may have some logical foundation even though hidden behind walls of stock Terra Cotta Renaissance. But in a Colonial or English country house, or even in the New England copy-book Americo-Tudor so dear to the hearts of the speculative builder, where is there any excuse for a room panelled in haphazard maple veneers with machine-cut triangles for mouldings, furnished with chrome-plated, ash-tray reading-chairs and stainless-steel prohibition-closets?

Rather than try to twist ourselves into knots finding an answer, let us see instead whether anything may be done by starting new, (*Continued on page* 78)

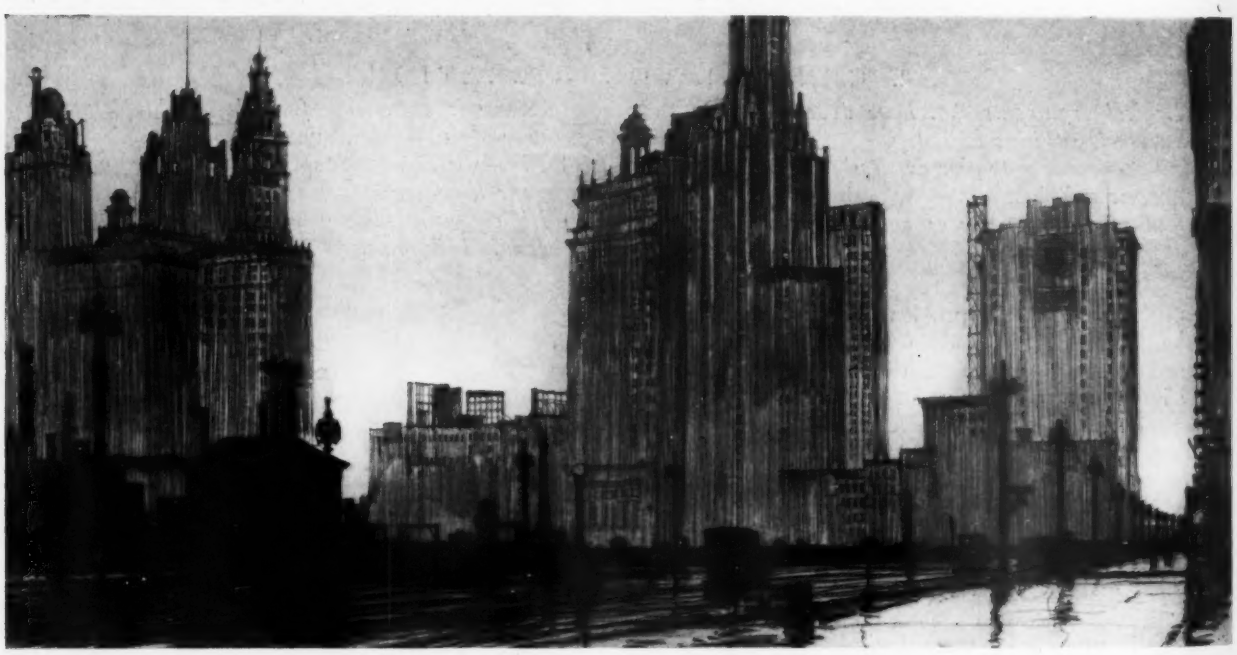


FANEUIL HALL
BOSTON

•

Three Drypoints by Samuel Chamberlain

Courtesy of Goodspeed's—Boston



DRIZZLY MORNING
IN CHICAGO

•

FEW artists have shown greater promise or gone as far in their field, in so short a time, as has Samuel Chamberlain. He made his first etching in 1925 while studying with Monsieur Edouard Leon. In five years Mr. Chamberlain has developed his technique in the art of etching to a high degree. His drawings of architectural subjects, whether made with pencil, pen and ink, or the etcher's tool, indicate a sympathetic understanding of architecture and its anatomy. His recent dry points show a steadily progressing development in artistic expression and self assurance.

MANHATTAN
OLD AND NEW

BUREAU OF STANDARDS MAKES TESTS ON

Sound Transmission of Materials

BY V. L. CHRISLER

Physicist, Bureau of Standards

ONE of the most difficult and yet most important problems in architectural acoustics is that of sound-proofing walls and floors. At the present time there seems to be little accurate knowledge on the subject and what data are available are more or less confusing. To illustrate this point let us listen to a few representatives of various products which are sold for sound insulation.

Representative A comes around with a fibrous material and tells us how good it is for sound insulation. He says that if a staggered stud partition is built and this material woven in between the studs it cuts out 75 percent of the sound which would otherwise pass through the partition. In the case of floors, you simply lay it on top of the joist, nail a strip of wood on top of it and lay the floor. In this case 90 per cent of the sound is not transmitted and he has laboratory tests which show his statements to be correct.

A few days later Representative B pays us a call and is discussing sound-proofing. We mention the material of A and the result he says he obtains. B, very likely, will tell us that it is all bunk, and that a fibrous material of that kind is of very little value as a sound insulator. He then proceeds to tell us about the wonderful sound insulator he has, which is some kind of a fiber board. He does admit though, that in some cases he fails to obtain a proper degree of sound insulation although he has used it in exactly the same manner as on a previous job where the results have been found to be perfectly satisfactory.

Representative C tells us the proper way to obtain sound insulation is to build a double masonry wall of clay tile or gypsum block and place his material, which is another kind of fiber board, between the two walls. To uphold his contention he tells of numerous installations in which the owner has been perfectly satisfied.

Representative D tells us that to obtain a really good job the walls and ceiling surfaces and floors should be carried on little "chairs" in which there are pads to prevent any direct contacts which would allow the sound to pass directly through the structure.

Many other cases might be mentioned, but finally E comes in and wishes to show us his system of sound-proofing and to demonstrate how superior it is to any other system. He has a large tuning fork which he says gives him a practical method of determining whether a structure is satisfactory or not. He states that if a structure can not be set in vibration by means of the fork so it can be heard on the opposite side, then the structure will be sufficiently sound-proof for conditions usually encountered.

To demonstrate how much better this system is than any other he has a small sounding box which he uses with the fork. When the stem of the fork is placed on the box a loud tone is produced. A piece of fiber board is then placed between the fork and the box but the sound is reduced very little. Next he places one of the chairs, which D claims gives excellent results, between the fork and the box. The sound is reduced a little more than by the fiber board but not to a great extent. He then places two or three different kinds of fiber board on the box in addition to the chair but still the sound is quite intense. Finally he places one of his clips, on which is mounted a small piece of plaster board and plaster, between the box and fork. The intensity of the sound is now decidedly less. He then explains that if the surfaces of a room are mounted on these clips sound energy will be dissipated in the same way and will not pass through the structure.

Now the question is what we are to believe about these various statements. Even assuming all the statements to be correct we still have no means of comparing

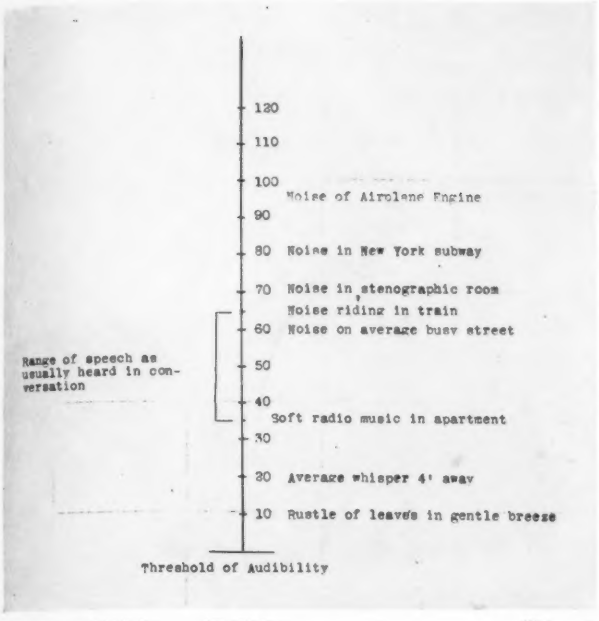


Figure 1

DECIBELS *or sensation units translated into an ear sensation scale and compared with familiar noises*

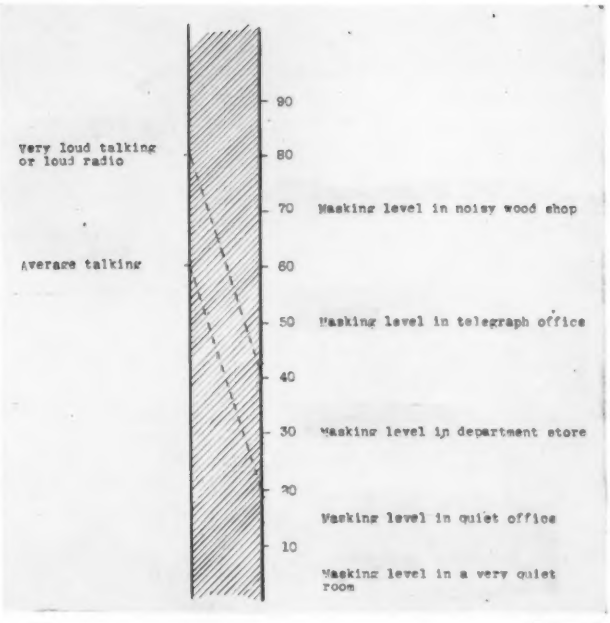


Figure 2

NOISE IN A ROOM *changes the masking level. The quiet office needs more insulation than a noisy one*

BEFORE CALCULATING INSULATION KNOW . . .

1. Intensity level of outside noise

Floors that insulate against air-borne noises may not eliminate impact sounds

2. Noise level in room

Walls must either be excessively heavy or else be built in layers loosely connected

the different methods of sound-proofing and determining which one will give the best results for the amount of money invested. To aid in answering the question, the Bureau of Standards built a special laboratory several years ago, and, in cooperation with a number of manufacturers of building materials, has tested a large number of different constructions for sound transmission.

THE instrument which is universally used to detect sound and to estimate its intensity is the human ear, but the ear does not respond according to the physical intensity of the sound vibration. As the intensity of a sound increases steadily on the physical scale, the response of the ear fails to keep pace with it. There appears to be in the ear a regulating or protective mechanism, which, like the well known mechanism of the eye, protects the organ against excessive stimulation. Experiment shows that the response of the ear is approximately proportional to the logarithm of the physical intensity; that is, energies proportional to 10, 100, and 1000 would produce in the ear effects proportional to 1, 2 and 3, respectively. This logarithmic scale has often been termed the ear scale.

A slight modification of this scale has been employed for some time by telephone engineers and is used in all audiometers made by the Western Electric Co. This scale merely multiplies the numbers of the ear scale by 10, the unit of this scale being that fractional change in intensity which is approximately the smallest that the average ear can detect. For this reason this unit is often called a sensation unit and more recently a decibel. In the example given above, intensities corresponding to 1, 2 and 3 on the ear scale would be represented by 10, 20 and 30 sensation units or decibels.

To understand a little more clearly what is meant by different intensities in sensation units or decibels, and how much this intensity may be reduced by a structure with a given reduction factor, Fig. 1 should be referred to. This scale was suggested by Mr. Wallace Waterfall, and gives an approximate idea of the value of sensation units in familiar terms. We might call it an ear sensation scale. The reduction factor as referred to in this paper is the difference in intensity, in sensation units or decibels, due to the presence of the wall or panel between the sound and the hearer.

Since starting this work in sound transmission at the Bureau of Standards about 140 different structures, varying from wrapping paper to an 8 inch brick wall, have been tested and a few general principles have been deduced from these measurements.

First let us consider masonry structures and sheets of materials which are more or less homogenous in structure. If we plot the logarithm of the weight per square foot against the reduction factor of the sound on

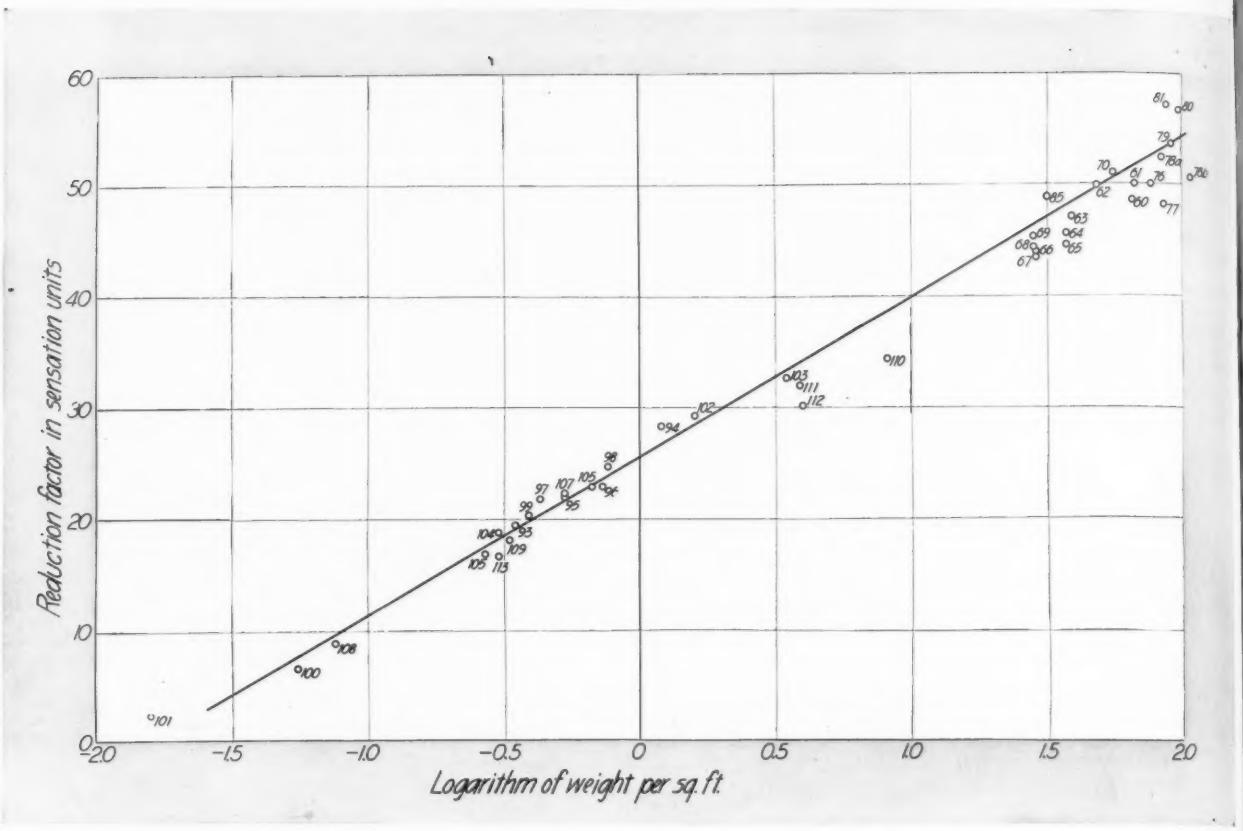


Figure 3

SOUND TRANSMISSION OF HOMOGENEOUS STRUCTURES

the ear scale we find that the points lie fairly close to a straight line as shown in Fig. 3. The lightest material was wrapping paper weighing .075 lb. to the square foot and the heaviest was a combination floor with a concrete finish weighing 109 lbs. per square foot. Among the materials between these extremes were Celotex, Insulite, iron, glass, lead, 4 inch clay tile wall, 4 inch brick wall, 8 inch brick wall.

One of the first principles which becomes evident from our results is that the reduction factor for such materials and structures depends largely upon the weight. There is probably some variation from this relation due to stiffness and possibly to the method of holding the edges, but these factors are of minor importance. To obtain satisfactory sound insulation by means of a homogeneous wall would require a prohibitive weight.

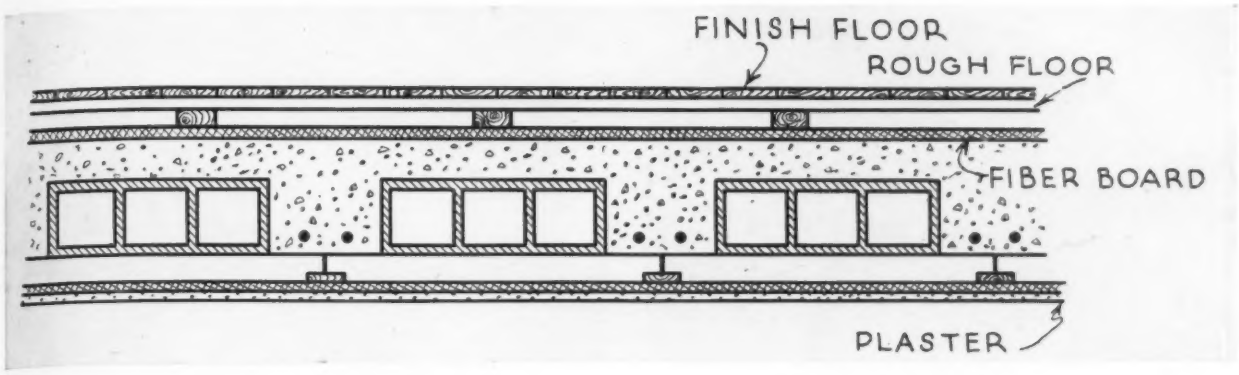
WITH this in mind let us examine other types of structures and see if we can find other methods by which we can obtain a satisfactory degree of sound insulation. Our first thought might be to use a double masonry wall. Referring to the curve we find that a single wall having a weight of ten pounds to the square foot should have a reduction factor of 40 sensation units. If we should place another similar wall behind this with an air space between them and get another 40 units sound reduction or 80 units in all, we would have a very good wall. Experiment shows that such a combination, while giving a reduction factor much greater than 40 fails to reach the theoretical figure of 80.

In the laboratory we have found that thin sheets of material with sometimes two sheets having an air space between them transmit just as much sound as a single sheet. In the case of heavier materials this is not true but there is sometimes not a very great improvement over a single wall. It is believed, if two walls are very similar in structure, that when one wall vibrates the other one is set in sympathetic vibration. Hence if a double wall is to be used one should be made heavier and thicker than the other to avoid this transfer of energy. Even when this precaution is taken there is still a transfer of energy around the edges where there must be a common support and the reduction due to the two walls is decidedly smaller than the sum of the reduction factors of the two walls when each is considered separately.

In the past and to some extent at the present time various filling materials have been placed between two walls to improve their sound insulation. Experiment shows that for walls weighnig 10 pounds or more per square foot, fillers of any kind are of little value. In some cases where dense materials are used they act as a tie between the walls and actually transmit more sound.

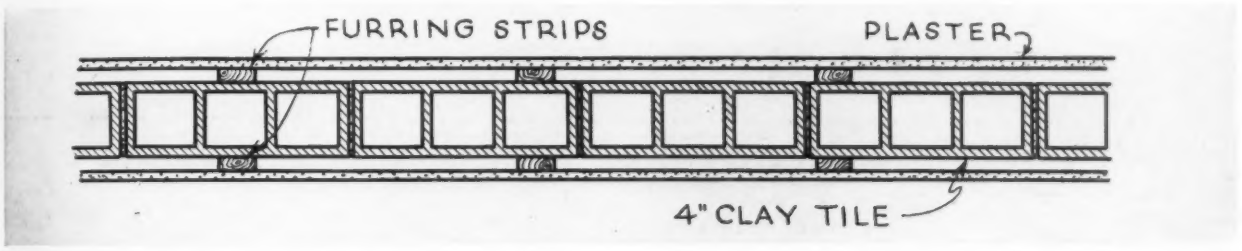
For lighter materials we find an apparent contradiction, for there it appears advantageous to put some light fibrous material between the two layers.

So far we have considered masonry structures. Some of the measurements of wood stud structures are also of considerable interest. Three different kinds of plaster were used on wood frames which were as nearly identical as possible, and the sound transmission was found to be different. In this case the curious thing was that the weaker the plaster the better it was as a sound insulator. In fact, one of the best of these panels



FLOOR CONSTRUCTION EFFECTIVE FOR IMPACT NOISE

Reduction factor for air-borne noises 70 *decibels*
Reduction factor for impact noises 51 *decibels*



THIS WALL CONSTRUCTION SHOWED HIGH EFFICIENCY

Reduction factor for air-borne noises 58 *decibels*

had metal lath with only a scratch coat of gypsum plaster. This scratch coat was so thin that between the studs it was flabby and easily pushed back and forth. A study of these results lead the investigators to some rather interesting conclusions.

THE two plaster surfaces act somewhat like a double wall but in this case they are tied together every sixteen inches. When a sound wave strikes one of the walls it tends to set it in vibration. If the plaster is strong and fairly rigid then the studs must also be set in vibration with the surface. This in turn causes the second surface to vibrate in the same manner and thus the energy is transferred to the air on the other side of the panel. But if the plaster is weak and flabby then the center sections between studs can give easily to the sound waves and little of this energy will be transferred to the studs. The studs, of course, are again set in vibration but not to such a great extent as before. In turn this means the second plaster surface is not set in as great vibration as before, also due to this surface being weak and having inertia the only portion which would be appreciably set in vibration would be that directly in front of the studs, while the center portion might remain almost stationary.

It is also apparent that most of the energy is transferred from one surface to the other through the studs and not through the air spaces between. Further experimental proof of this statement has been found in a number of cases where different materials have been put into this air space. In only one or two cases where the material was very heavy and materially increased the total weight of the panel was it found to be of any value. In several cases it actually decreased the sound insulation of the panel.

Having discovered the above facts, how can they be made use of to design a wall which is a good sound insulator? It is quite evident that in the case of the walls they would be better sound insulators if the studs could be made stiffer or if they could be made massive so the motion of the surface would not easily set them in motion. To obtain this condition of having something with considerable mass we might build a masonry wall and then attach the plaster surface to this every sixteen inches, the same as it is attached to studs. This was tried in the laboratory by using wood furring strips about sixteen inches on centers on a four inch hollow clay tile wall. In this way the plaster is held about ¾ inch from the masonry. If metal lath is used paper must be placed behind it to prevent the plaster from making a bond with the tile. It was found when both sides were treated in this manner that it was a better sound insulator than an eight inch brick wall and weighed only a little over one third as much.

Probably this would not be a very satisfactory method of attaching the plaster surface to the masonry, and special devices for this purpose should be worked out. In fact, that is the purpose of the little "chairs" and "clips" mentioned in the introduction. When the wall surfaces are attached in this manner they are free to move to some extent without shaking the masonry core and thus transferring the sound to the opposite side. There are probably other methods by which these surfaces could be attached and (*Continued on page* 98)

MERCY

VIGILANCE

INDIAN DOMAIN

POWER

JUSTICE

Designed to be seen 40 feet above eye level

FIVE of twenty limestone panels, designed and executed for the Jefferson County Court House, Birmingham, Ala., by LEO FRIEDLANDER, sculptor. Holabird & Root, Architects

•

. . . why not

Call it a "STONE HOUSE?"

how otherwise can design be freed from the fetters of the past?

By R. W. SEXTON

GILLIES

Lewis Bowman, architect

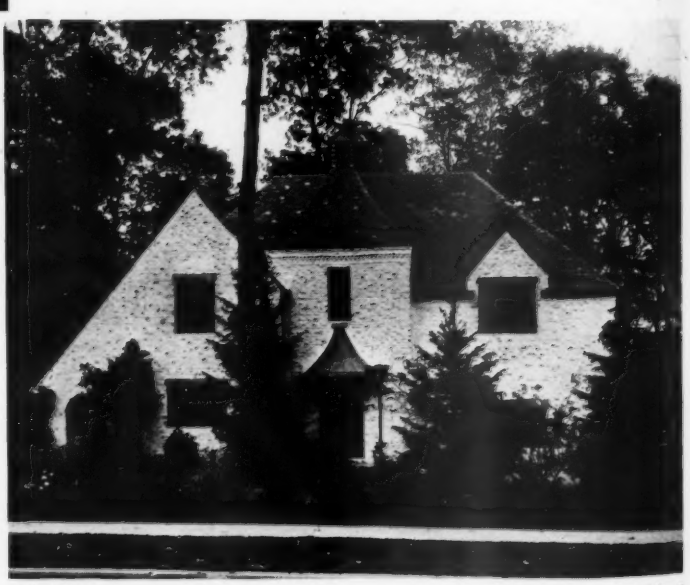
IT is unfortunate that there is not a word in our language by which to distinguish between style, meaning a vogue or a mode, and style, in an architectural sense. As a people, we crave "style," whether it affects the clothes we wear, the games we play or the design of the houses and buildings in which we live and carry on our daily tasks. In reality, it is fashion that exerts such an influence on our lives—not style. In our slovenly use of words, we use the two words, fashion and style, as synonyms. But they are not. Fashion means the prevailing mode as relating to conventional usage, while style refers to the distinctive manner in which that mode is presented. When we say, for example, that it is the style for women to wear bobbed hair, we really mean that bobbed hair is the fashion. There are various styles in which hair may be bobbed and each style may be fashionable.

But, you ask, what has all this to do with architecture? Fashion is certainly not an architectural term. No. And furthermore, it is a word which is against the principles on which architecture is founded. It immediately implies standardization, and thereby the elimination of individuality, while style, in its true architectural sense, conveys quite the opposite meaning, suggesting at once character and originality in design.

TUDOR... or half timber?

NORMAN.. or brick?

- *There is plenty of talk over the luncheon table about the necessity for architecture expressing an honest use of materials. Why should not modern terminology reflect that thought?*
- *Certainly it would help to design in materials expressive of modern life rather than in periods inspired by an age which is dead and gone.*
- *Too, the man in the street would then replace bewilderment with understanding, for if architects themselves can not always classify a period, how can the layman be expected to do so?*



VAN ANDA

Arthur Coote, architect

Warren Shepard Matthews, architect

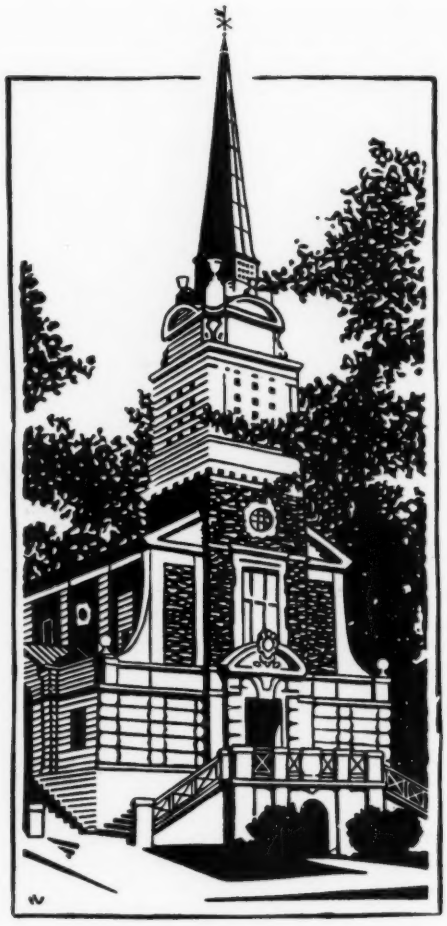
Robert H. Scannell, architect

Julius Gregory, architect

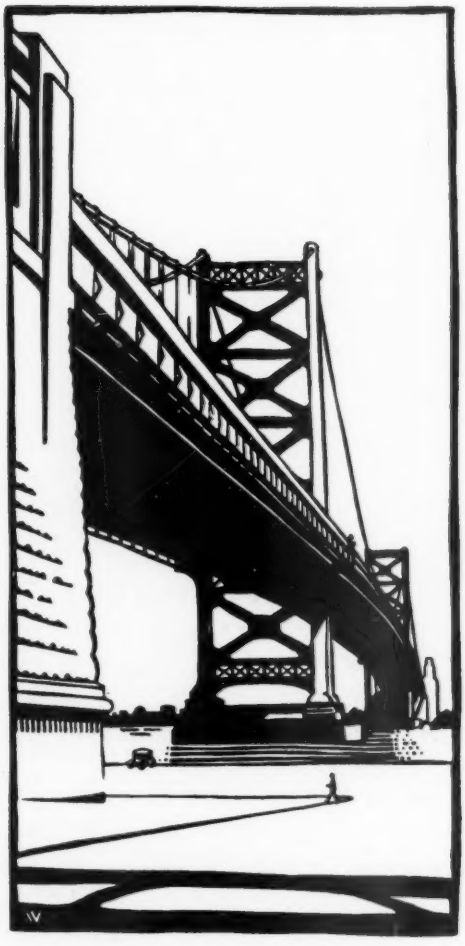
How better to describe these houses than as "stone," "shingle" or "stucco?"

During the last twenty-five years or so, while copy-book architecture was being both preached and practiced in this country, "period designs" were the fashion and the fashion was expressed by a design that conformed to some one in particular of the architectural styles. So fashion not only dictated the mode, but also the manner of expressing it. Thus were individuality and originality immediately shelved.

I do not intend to put the blame for this unfortunate condition on the shoulders of any one group. I think the real estate operators are partly to blame, for they jumped at the idea, recognizing the sales value of a period label, and the speculative builder and quack architect found their troubles ended by purchasing a few books on "the styles." But the people themselves fell the hardest. Owners of all (*Continued on page* 94)



Unitarian Church on Lincoln Drive



Bridge Across the Delaware

Two Philadelphia Scenes Cut on Rubber

by A. B. Weaver, Jr., *Philadelphia*

with PEN and GRAVER

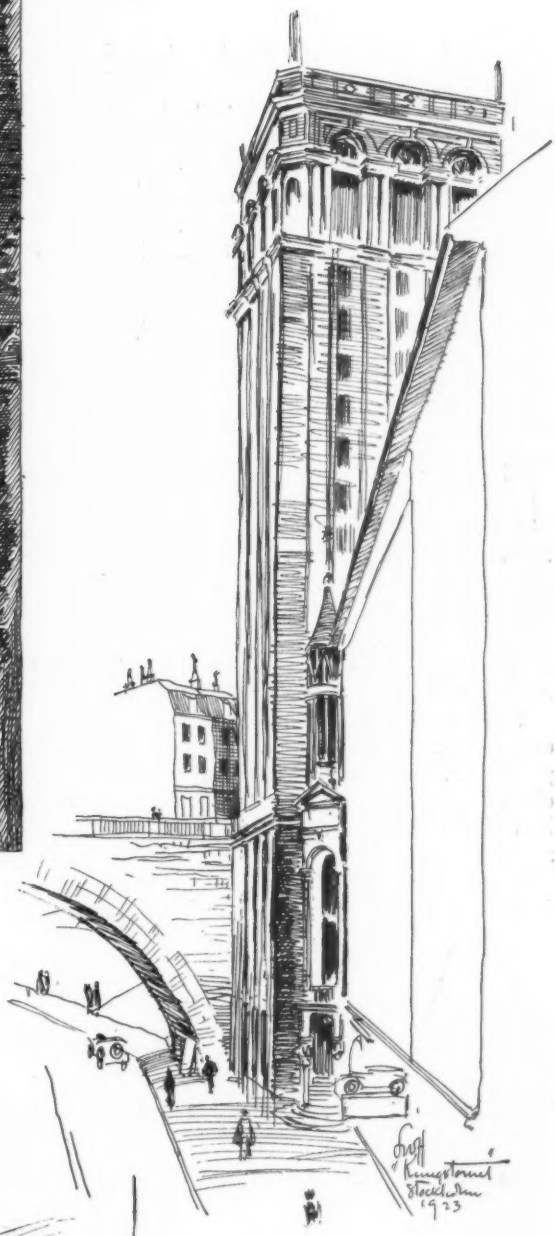
Old Houses, Quebec

Woodcut by

Sherwood T. Allen, *New York*

Rue du Chateau, Josselin

by E. D. Stevens, *Lynchburg, Va.*



King's Tower

Stockholm

•

An Old Street

South Stockholm

by

Lance W. Hart

Aberdeen, Washington

ARCHITECTURAL USES OF CHROME NICKEL STEEL

the metal used for the Chrysler Tower and the Empire State Building . . . .

BY ERNEST EBERHARD

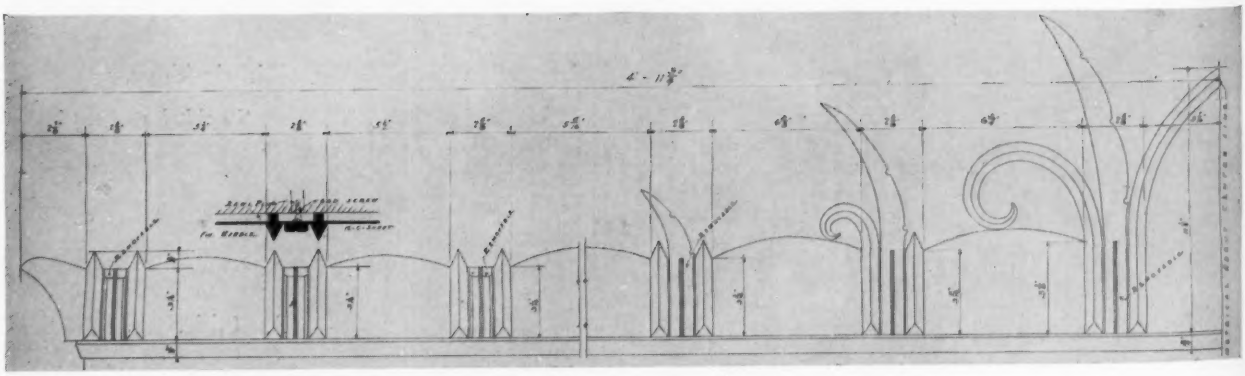
THE use of chrome nickel steel on the Chrysler Building and the Empire State Building has focused the attention of the architectural profession upon the comparatively recent introduction for architectural purposes of this non-corrosive metal. The chief advantages of the material are exceptional strength and a naturally high resistance to corrosion which makes a protective surface treatment unnecessary. The metal is, therefore, adapted to both exterior and interior use.

There are several chrome nickel steel alloys of various compositions with a wide range of mechanical properties. Alloys used in architectural work are principally composed of from 16½ to 19½ per cent chromium and 7 to 10 per cent nickel combined with steel; a few other elements are present in small proportions.

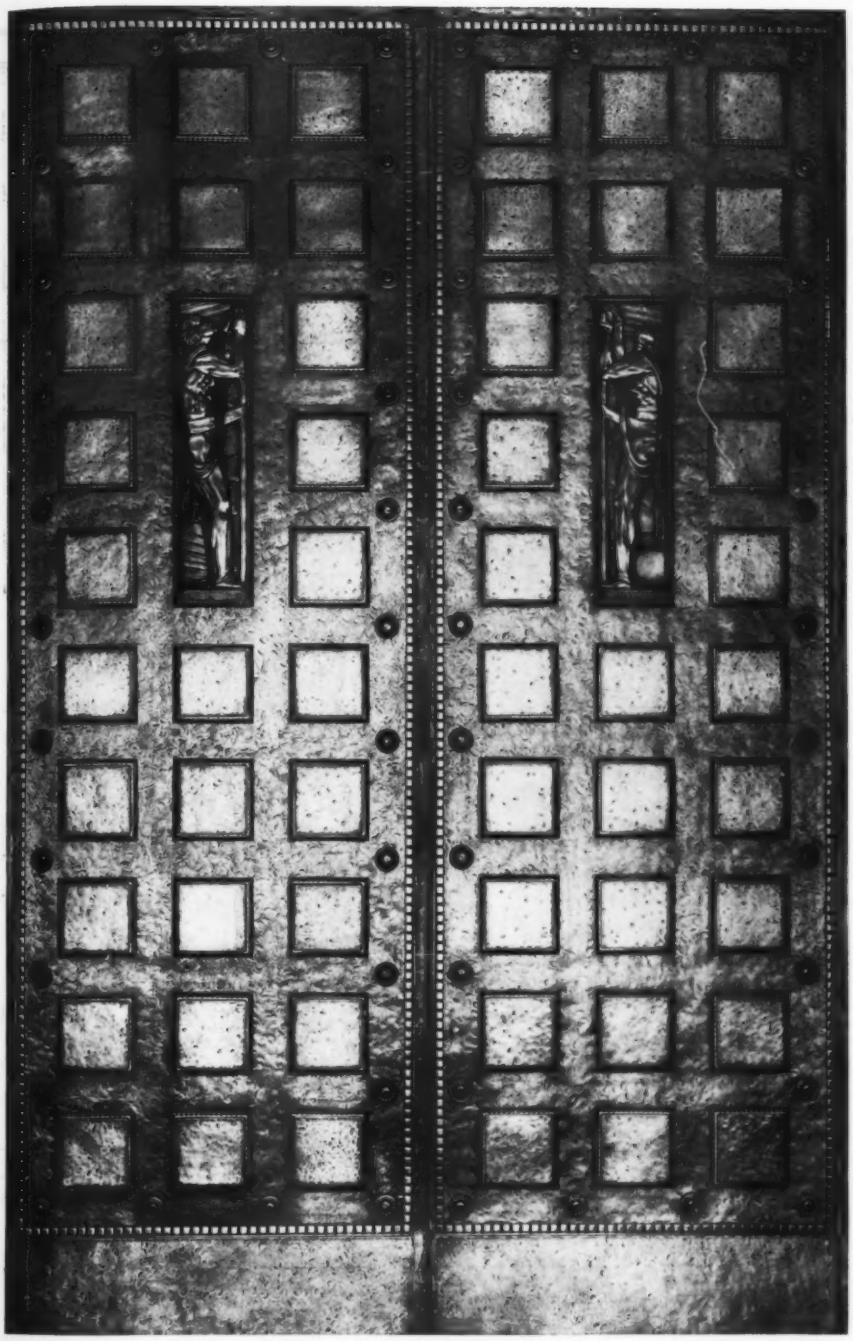
These alloys are of an austenitic nature, a term referring to the temperature at which the metal is cooled and indicating the possession of properties peculiar to steel cooled at that temperature. They have a tensile strength of from 85,000 to 95,000 lbs. per square inch; ductility is slightly less than that of copper. Although a more expensive metal than bronze, yet the greater strength of chrome nickel steel makes possible the employment of thinner sections so that, less of the material being used, its cost becomes more nearly comparable to that of other metals.

Chrome nickel steel can be bent, tapped or threaded, flanged or otherwise formed the same as ordinary steel, thus facilitating the work of installation. It can be worked in the same manner as other metals: drawn; spun; forged; stamped, particularly relief in thin sheets; repoussé; or cast—but it has not yet been extruded. When an unusually high resistance to corrosion is desired, the metal should be annealed after working,

DREYER

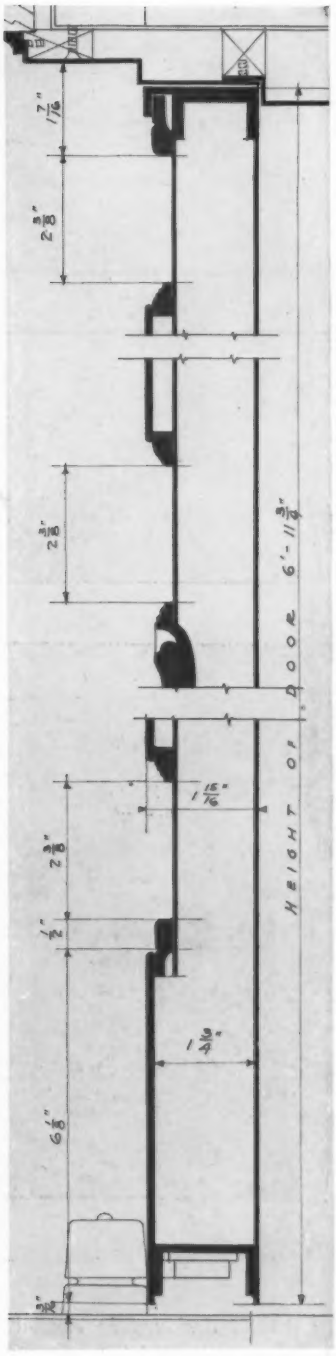


CRESTING *over the directory board in the main lobby of the Chrysler Building, New York. The flat members with curved top are cut from sheets and shaped; the short vertical members are bar material cut and shaped; the line between the vertical members is machine engraved; the curved members are hand forged and hand engraved. Assembled partly by welding and partly by chrome nickel screws. Executed by Oscar Bach. William Van Alen, architect*



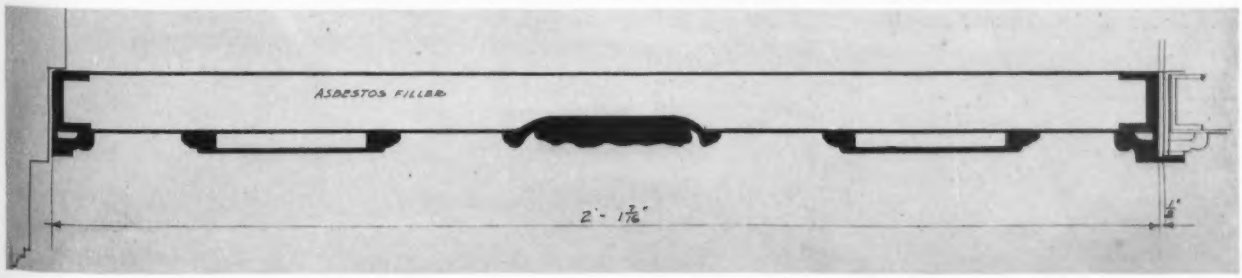
DREVER

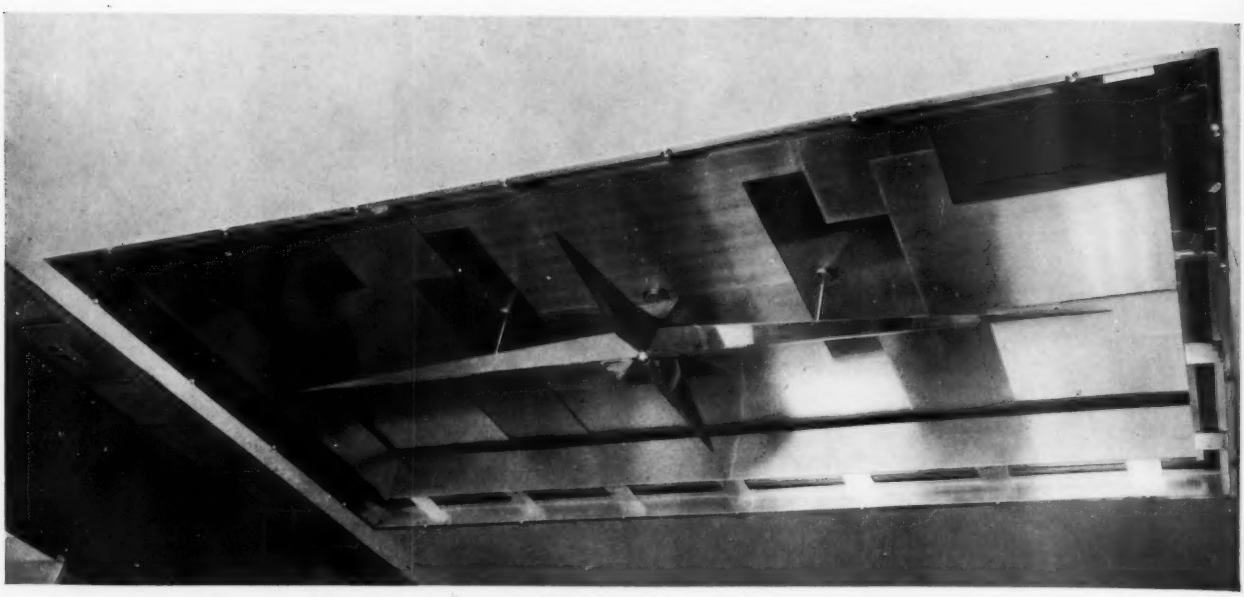
ANTIQUE EFFECT, *hand-wrought and similar in appearance to old armor, is the finish used for the chrome nickel steel in the elevator doors of the Suburban Bell Telephone Building, Cincinnati, Ohio. The figures are of bronze, as is the frame around the panels. Rosettes are of bronze and vitreous enamels. The border is repoussé. Designed, executed and copyrighted by Oscar Bach. Harry Hake, architect*



VERTICAL SECTION *of elevator door illustrated at the left showing how construction influenced design. Assembled by welding and chrome nickel screws*

HORIZONTAL SECTION *of elevator door in Suburban Bell Telephone Building*





VAN ANDA

DREYER

though this is not necessary for ordinary architectural work excepting for welds.

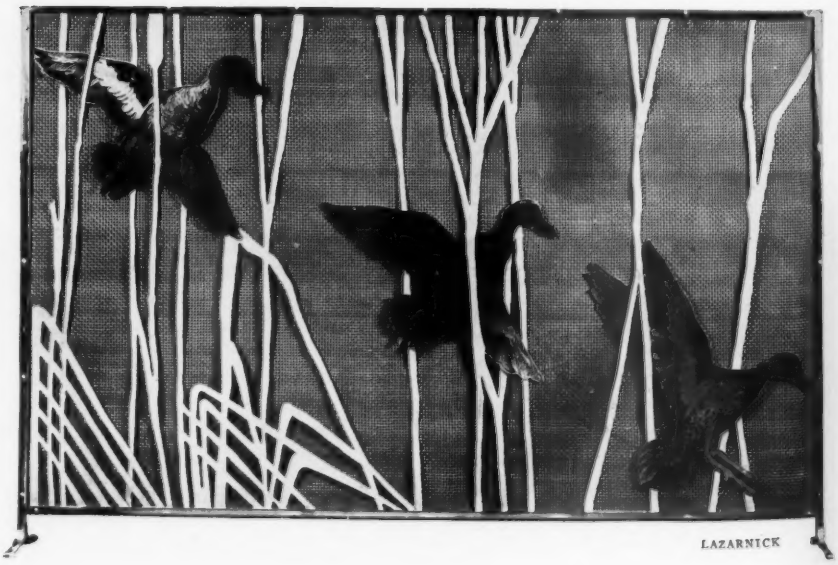
The metal can be soldered, spot welded, or welded, either by acetylene torch or electric arc. When welded, the two surfaces join without visible division and with no danger of corrosion provided that the weld is cooled quickly, polished, heat treated and thoroughly pickled. The metal may also be riveted, but either rivets or screws must be of chrome nickel steel. Of the various methods for joining sections, screwing and riveting are to be preferred for architectural work.

The metal is non-magnetic. When used in connection with other metals under certain extreme conditions, as exposure to sea air or sulphurous smoke, it should be separated by a non-metallic separator such as asphalt or similar material. This is necessary to prevent electrolytic action which takes place when two dissimilar metals are joined under unfavorable

CEILING *designed in chrome nickel steel for the Krupp "Nirosta" exhibit room in the New York Central Building. Rodgers and Poor, architects*

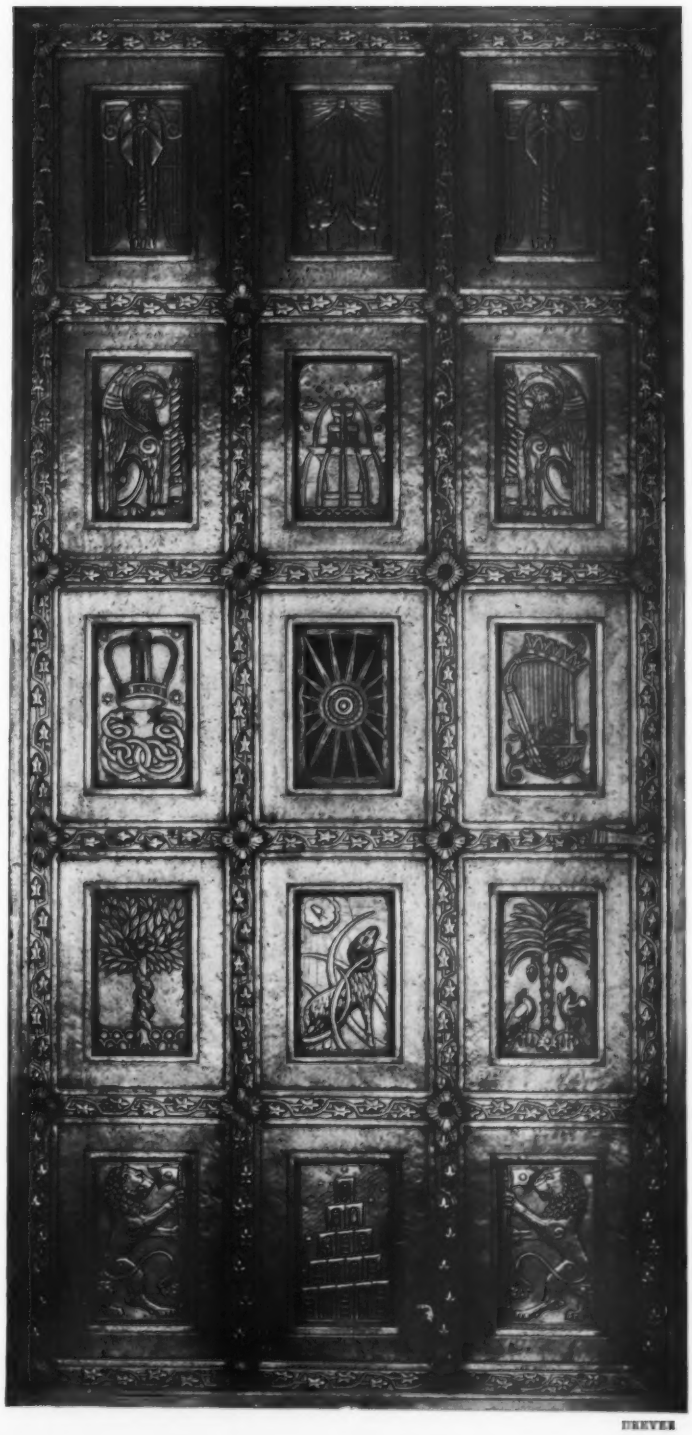
SPANDREL, *stamped in chrome nickel steel, antique finish. Executed by Oscar Bach*

FIRE SCREEN, *cut from flat sheets and etched. Designed and executed by E. B. McKinney of Sexauer and Lemke*



LAZARNICK

REPOUSSÉ *work in chrome nickel steel inlaid with gold and silver for a mausoleum door designed, executed and copyrighted by Oscar Bach*



DREYER

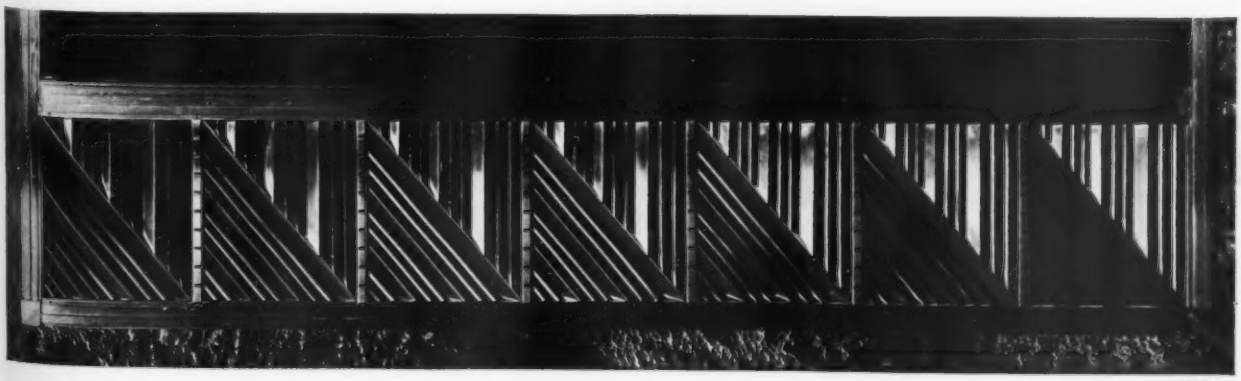
conditions. Chrome nickel steel can, however, be welded to ordinary steel without much danger from this phenomenon. When flashed, the flashings should be made of this same material.

As regards finishing, chrome nickel steel may be given a ground, satin, or buff finish; an antique finish similar to that of old armor; high-lighted; and otherwise similarly treated. A highly polished finish is popular at the present time, for the material may readily be made to take on a mirror brightness. The very hardness and brilliance of the metal makes this finish a difficult one to handle, particularly in large sections, for a slight wave or minute depression imperceptible in other metals will be instantly visible. The material is sufficiently hard to resist scratches. It can be etched or engraved. Painting with lacquer colors is possible without difficulty, though metallic salts in the paint should be avoided. Its surface is extremely pleasing to the touch.

The metal is highly resistive to corrosion, particularly when polished, and is not affected by many organic or inorganic chemicals. It is attacked by hydrochloric and sulphuric acid but is more resistant than steel to their action. The material is more difficult to work than ordinary steel and, if fabrication is unusual, requires equipment not to be found in the ordinary metal-working shop. Pickling is essential at the completion of the various operations if surface rust is to be prevented.

This surface rust is not a rusting of the alloy itself, which is rustless; it is a rusting of particles of iron picked up from tools used in working the metal, or other surface conditions in-

RADIATOR GRILLE, *under show window in main lobby, Chrysler Building. Of stock shapes, angles and bars, highly polished and assembled by welding and chrome nickel screws. The vertical separation bars are engraved. Executed by Oscar Bach. William Van Alen, architect*



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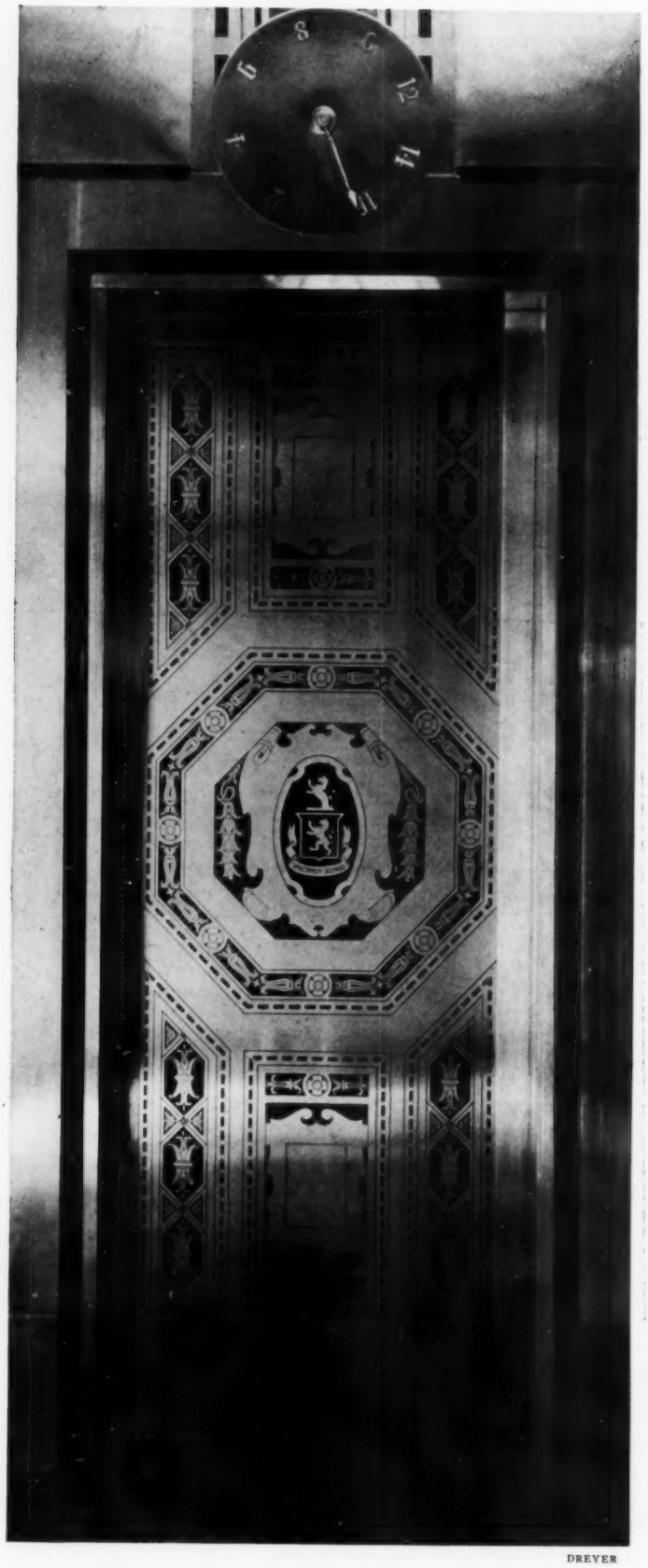
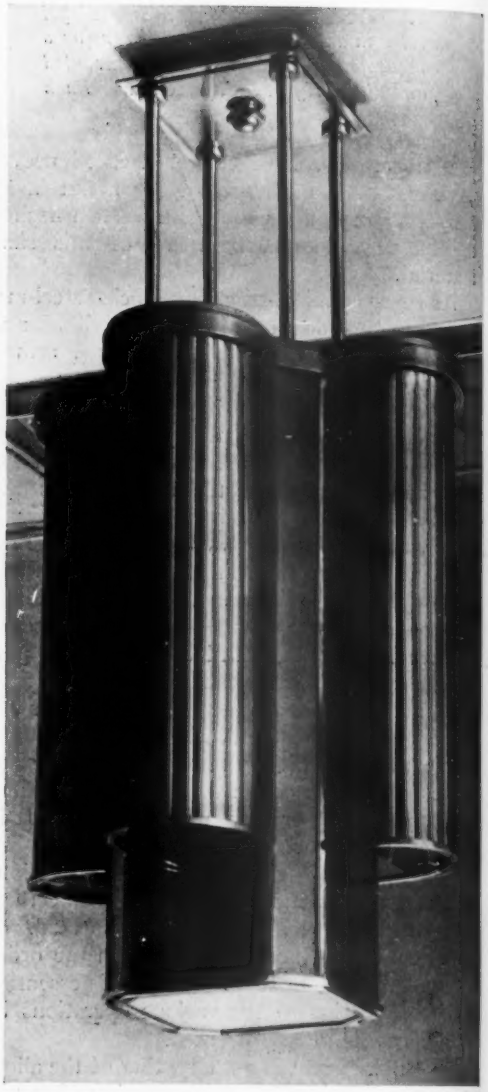


DREYER

ETCHED *elevator door, designed and executed by the Metal Door & Trim Company, in the remodeled Hotel Ansonia. New York. Walter S. Schneider, architect*



VAN ANDA

LIGHTING FIXTURE *in antique finish for the Krupp "Nirosta" exhibit room, New York Central Building. Executed by Cox, Nostrand & Gunnison. Rodgers and Poor, architects*

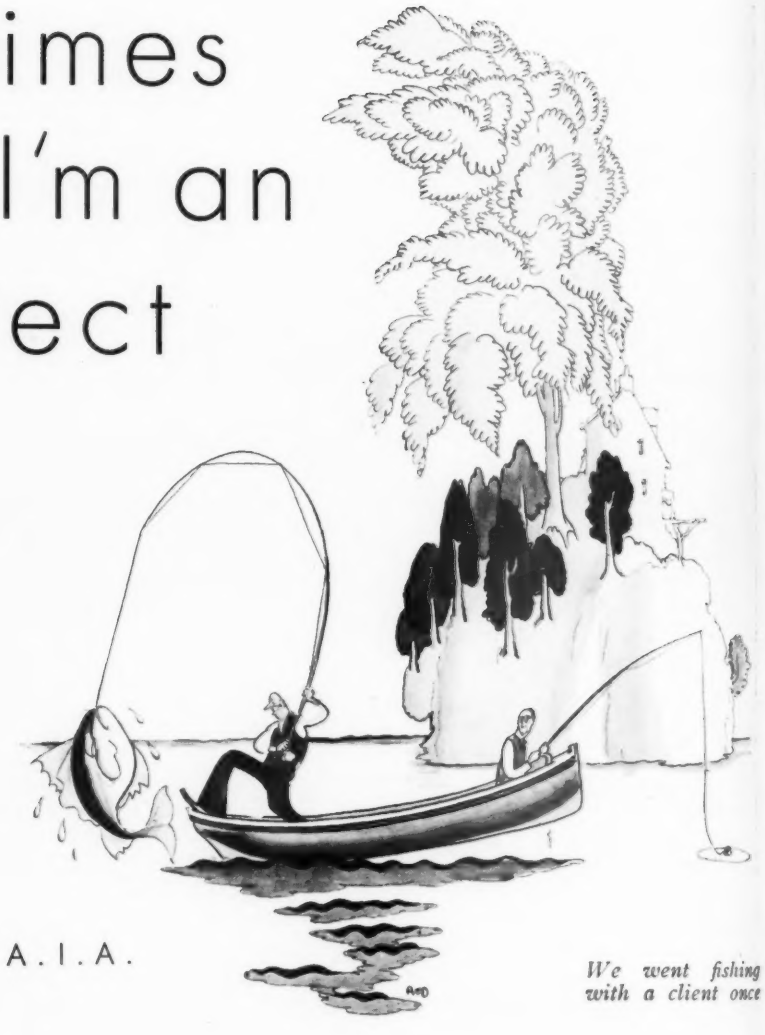
curred in working. The object of pickling is to eat away these particles of iron and retain a perfect surface. When carelessly worked with insufficient pickling, surface rust may soon form. This surface rust may be removed by careful scrubbing with a solution of nitric acid; in severe cases several scrubbings may be necessary before rusting permanently disappears.

The metal is especially adaptable to the present decorative tendency to make use of flat surfaces. That is, the manner of designing which is most suitable for chrome nickel steel, and which brings out its natural beauty to greatest advantage, is through the use of a series of planes welded together or otherwise joined. Such design is relatively inexpensive and, through the use of antique, hammered or a combination of finishes, is thoroughly effective in the modern manner.

TYPICAL OF MODERN DESIGN

The cornice moulding, door trim and baseboard are of chrome nickel steel designed and executed by the Metal Door & Trim Company. The ceiling treatment is typical of the use of flat surfaces in modern design, a decorative handling to which chrome nickel steel is particularly adapted. Furniture is of chrome nickel steel, brass and aluminum designed and executed by Oscar Bach. Office in the Daily News Building, New York. Raymond Hood, architect

...sometimes I'm glad I'm an Architect



We went fishing with a client once

By

C. W. FAIRWEATHER, A.I.A.

IF you go out on Peconic Bay in August, and look over the side of the boat before you get out to deep water, you see thousands of little black things resting on the sand bottom. Thousands, yes millions. Millions of little black shelled scallops just lying around and minding their own business. And once in a while you see one come up to the surface. You see it slowly ascend until it reaches the top and then it opens its shell and takes a hurried gasp of air, returning to the bottom afterwards in a leisurely manner. It seems odd to see a shell moving through the water; it is about the same as if you saw a Brussels sprout picking its way across a vegetable patch.

Now the architect's lot bears some resemblance to that of the scallop. We spend most of our time submerged in a sea of misunderstanding; generally we lie around with nothing much to do, and once in a while we work our way through that sea to gasp something. This article is a gasp!

Sometimes people ask us to submit free sketches for their homes in competition with other architects, and with the understanding that they are not to be committed in any way. When the public is in jail, it doesn't invite lawyers to submit free schemes to get it out. Why should they expect us to go into catch-as-catch-can fights like that? Of course we refuse. Mind you, we like work, but we are not addicts. We can take it or leave it alone. Once in a while we do go into a competition if it is run under Marquis of Queensbury rules, and if we are not thinking what we are doing, but that is a cumbersome way of selecting an architect. Direct appointment is better both from the point of view of the owner and the profession.

Another thing that bothers us is the matter of appropriations. Why are they always so undernourished? Couldn't somebody send the whole bunch of them to the mountains and get them fattened up for the spring trade? Won't some philanthropic person do something about this? We have a couple of appropriations right now which are in the early stages of tuberculosis and we know that they can be saved.

How often we have been through that painful scene when the bids are opened! Our remorse over the hurt look in mother's eyes! Our admiration for father's manly bearing, and those awful fifteen minutes we all spend brooding until he says, "Are you sure the low man is responsible?"

What is the matter with our teachers? They fill us

Sometimes we lie awake at night thinking of the wrongs that clients have done us

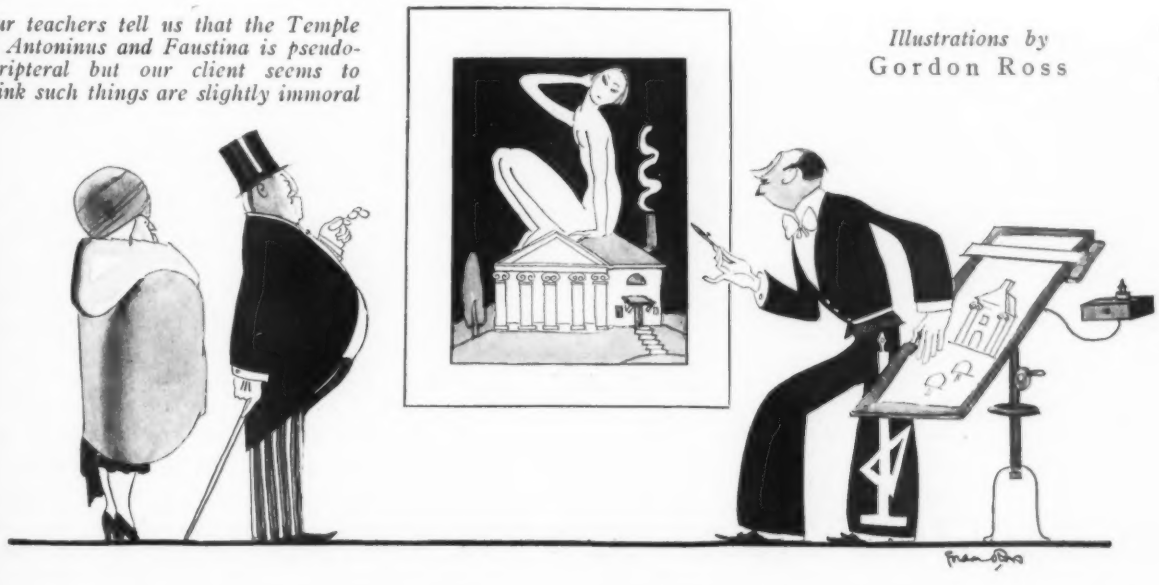
full of nonsense about the Five Orders and tell us that the Temple of Antoninus and Faustina is pseudo-peripteral and then when we get a job the client doesn't want to talk about such things at all. He seems to think that they are slightly immoral and suggests that Faustina was probably no better than she should have been. We have to talk about golf, starboard motors, and the latest models in baby carriages. Why can't they teach us about those things, and drop the other stuff?

We went fishing with a client once just after we had started the excavation, and he got a full basket and we caught only two blow-fishes. We suffered from an inferiority complex for the rest of the job.

Why is it that those of our clients who know more than we do are modest in their bearing and those who know less are not? Nothing is more discouraging to an architect than to get one of those fellows who are up and coming. You know, up financially, and coming culturally. Thank goodness we never drew one ourselves—but a friend of ours did. He tore his heart out to give the man a fine building, using hypnotism, auto-suggestion and thought transference and when he got the last coat of enamel on the woodwork he felt like Napoleon Bonaparte before the Battle of Waterloo. And when he saw the drapes he felt like Napoleon at Elba, or St. Helena—we forget which.

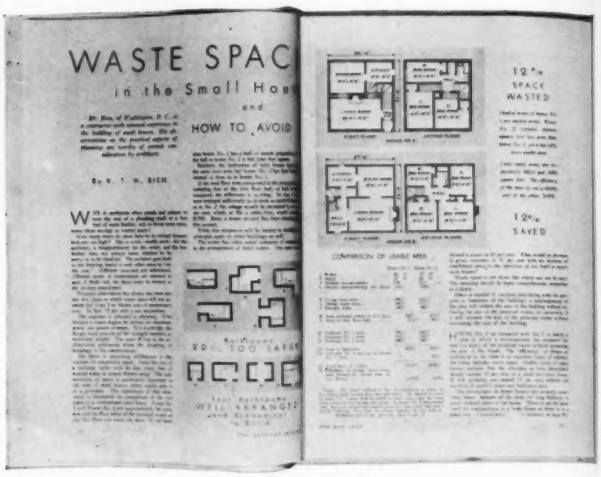
But there is a converse side to that. We have seen clients finish the work so well that most of their fees went into redecorating our own house. We remember the one who got us started on antiques, and then laughed at us for buying three grandfather's clocks. We laugh at ourselves for that, but still it's nice to have them. We like to hear them tick, and like to hear them strike. Sometimes we lie awake at night thinking of the wrongs that clients have done us, wondering why the mattress is so hard and trying this side and that, when suddenly the silence is broken and the first clock, the little cottage one, raps off the hour and raps it off in a businesslike (*Continued on page* 84)

Our teachers tell us that the Temple of Antoninus and Faustina is pseudo-peripteral but our client seems to think such things are slightly immoral



Illustrations by Gordon Ross

...when is waste space WASTED?


WASTE SPAC
in the Small Hou
and
HOW TO AVOID
12% SPACE WASTED
12% SAVED

Comments on "Waste Space in the Small House," published in the May issue of The American Architect

•

By PAUL V. L. STEWART
An architect of Cleveland, Ohio

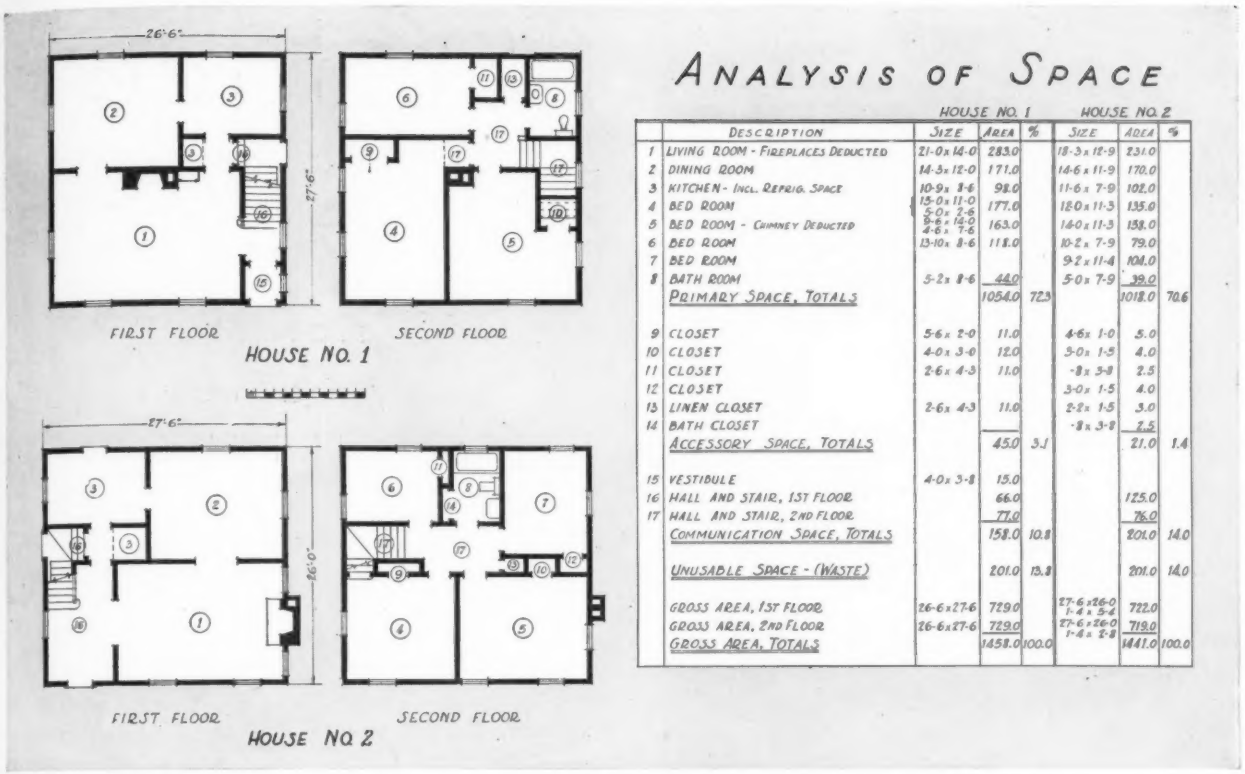
TO steer a safe course between the Scylla of the aspiring, aesthetic architect and the Charybdis of the efficient, economical engineer is a difficult task, and the builder of a small house who accomplishes the feat may well be congratulated. It is the misfortune of nearly every such builder to be beguiled by the wiles of one or the other. In most examples of small house design either the practical and economical aspects of the problem are subordinated or ignored by a designer whose sole ideal is to produce a diminutive chateau, manor, casa, or what-have-you, regardless of fitness and expense; or the aesthetical aspects of the problem are ignored by a "practical" planner whose sole object is to squeeze two more square feet of "usable" floor space into a given plan.

Neither of these courses alone will produce a successful small house design. As all life is a compromise —a compromise between the desired and the attainable— so the design of a small house is a compromise between the application of aesthetic ideals and the restrictions imposed by practical considerations. In the blending of architectural and engineering principles and their application to the problem lies the successful solution of any small house design problem. The architect and the engineer must combine forces so that there may be realized an ideal relation between them, a relation which is, as Claude Bragdon has observed, "that of a happily wedded pair—strength married to beauty."

In the May issue of THE AMERICAN ARCHITECT, Mr. V. T. H. Bien takes architects to task for their uncanny ability to waste space, and points to the wisdom of applying engineering principles in planning a small house. Unquestionably Mr. Bien's criticisms are justified in many instances, and his observations on the practical aspects of planning *are* worthy of serious consideration. Yet Mr. Bien's demonstration of his method of saving space as exemplified in his restudied house plan leaves him open to the charge of robbing Peter to pay Paul, and justifies the contention that the practical, engineer-minded planner will seldom achieve happy results. Nevertheless, there is, as Mr. Bien contends, much room for improvement in plan efficiency, as can readily be seen by examination of many of the plans submitted in small house competitions or published by small house plan bureaus and similar organizations.

The writer, however, takes issue with Mr. Bien on his method of plan-analysis, and considers his definition of waste space to be far-fetched; his definition ignores the aesthetic aspects of planning, takes no cognizance of the appearance of the house. Waste space is that which cannot be used for the purpose for which it was intended or that which cannot be adapted for other normal usage. For instance, some of Mr. Bien's clothes closets are waste space and worse; why go to the expense of building a partition, including door and trim, to provide an eight-inch deep closet such as Mr. Bien shows for bedroom No. 4? Why waste space to build a stair in which headroom is provided by only nine, or ten risers, at most?

Mr. Bien determines waste space as that taken up by



ANALYSIS OF SPACE

	DESCRIPTION	HOUSE NO. 1 SIZE	AREA	%	HOUSE NO. 2 SIZE	AREA	%
1	LIVING ROOM - FIREPLACES DEDUCTED	21-0 x 14-0	283.0		18-3 x 12-9	231.0	
2	DINING ROOM	14-3 x 12-0	171.0		14-6 x 11-9	170.0	
3	KITCHEN - INCL. REFRIG. SPACE	10-9 x 8-6	98.0		11-6 x 7-9	102.0	
4	BED ROOM	15-0 x 11-0	177.0		12-0 x 11-3	135.0	
5	BED ROOM - CHIMNEY DEDUCTED	5-0 x 2-6 9-6 x 14-0 4-6 x 7-6	163.0		14-0 x 11-3	158.0	
6	BED ROOM	13-10 x 8-6	118.0		10-2 x 7-9	79.0	
7	BED ROOM				9-2 x 11-4	104.0	
8	BATH ROOM	5-2 x 8-6	44.0		5-0 x 7-9	39.0	
	PRIMARY SPACE, TOTALS		1054.0	72.3		1018.0	70.6
9	CLOSET	5-6 x 2-0	11.0		4-6 x 1-0	5.0	
10	CLOSET	4-0 x 3-0	12.0		5-0 x 1-5	4.0	
11	CLOSET	2-6 x 4-3	11.0		-8 x 3-8	2.5	
12	CLOSET				3-0 x 1-5	4.0	
13	LINEN CLOSET	2-6 x 4-3	11.0		2-2 x 1-5	3.0	
14	BATH CLOSET				-8 x 3-8	2.5	
	ACCESSORY SPACE, TOTALS		45.0	3.1		21.0	1.4
15	VESTIBULE	4-0 x 3-8	15.0				
16	HALL AND STAIR, 1ST FLOOR		66.0			125.0	
17	HALL AND STAIR, 2ND FLOOR		77.0			76.0	
	COMMUNICATION SPACE, TOTALS		158.0	10.8		201.0	14.0
	UNUSABLE SPACE - (WASTE)		201.0	13.8		201.0	14.0
	GROSS AREA, 1ST FLOOR	26-6 x 27-6	729.0		27-6 x 26-0 1-4 x 5-4	722.0	
	GROSS AREA, 2ND FLOOR	26-6 x 27-6	729.0		27-6 x 26-0 1-4 x 2-8	719.0	
	GROSS AREA, TOTALS		1458.0	100.0		1441.0	100.0

Mr. Stewart analyses the floor plans of V. T. H. Bien from a new point of view

WHEN SPACE HAS BEEN DIVIDED AS TO USE . .

House number 1		*House number 2*	
Primary space.....	72.3%	Primary space.....	70.6%
Accessory space.....	3.1%	Accessory space.....	1.4%
Communicating space....	10.8%	Communicating space....	14.0%
Waste space.....	13.8%	Waste space.....	14.0%

closets, bath, second floor hall, and walls. Why the first floor hall is not considered waste is not evident. Upon that basis the economical thing to do is to plan a house with one room on each floor—a combined living-room, dining-room, and kitchen on the first floor, and a single dormitory on the second floor, the bath being relegated to the basement. Then try to sell it!

The writer presents, herewith, a classification of the floor space of the small house arranged differently. The space categories are as follows:

1st—Primary space, or net room space.

2nd—Accessory space, such as clothes closets, detached pantry, breakfast nook if separate and additional to a dining-room.

3rd—Communication space, as vestibule, halls, stairs.

4th—Unusable, or waste space.

By determining the proportion of each type of floor space according to this classification we have a more logical basis for comparison of several plans. No fixed minimum percentage of each type of space can be established, the classification being intended solely as a basis for comparison, although a consistent study of numerous successful plans would in time yield an average minimum to be striven for. But too many extraneous factors enter into planning to permit of hard and fast rules being laid down—personal tastes and predilections, locality, building codes, "style," and the owner's purse.

Applying the writer's scheme of space analysis to the two house plans illustrated in Mr. Bien's article, somewhat different results are obtained. To insure absolute fairness, the plans were redrawn, accurately, and the areas computed and classified as indicated by the index numbers. It should be noted that the walls of Mr. Bien's House No. 1 were masonry; these have been changed to stud walls, for comparison with House No. 2. Also the double partitions at one side of the living-room of House No. 1 have been changed to single partitions; the purpose of the double partitions is not clear, as they are unnecessarily deep for (*Continued on page 76*)

400 MADISON AVENUE
and the Ritz Carlton Hotel, New York, where the tests were made

Surface Reflection

of materials may affect ZONING

by

H. A. BREEDING
Illuminating Engineer, General Electric Company

CAN we zone a business district solely in terms of an arbitrary height or fixed relation to the width of the street without taking into consideration the materials with which the proposed buildings are to be faced?

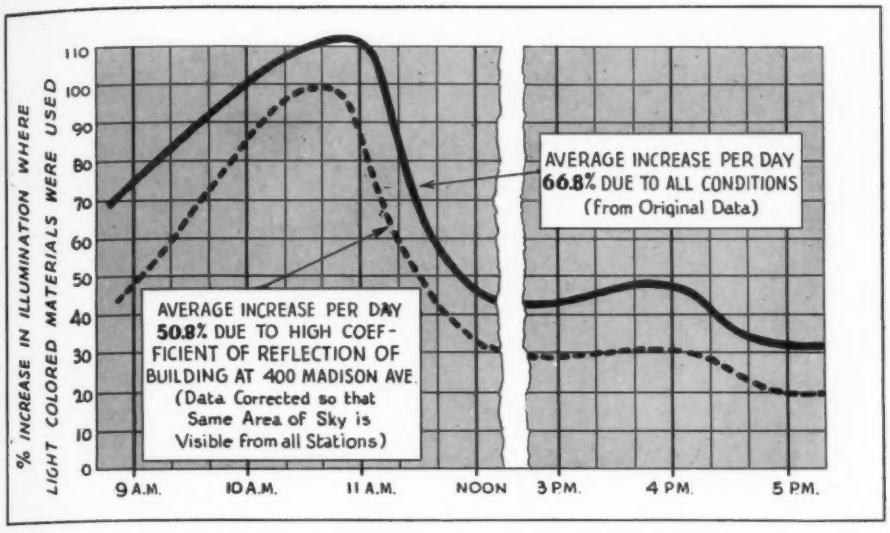
Recent experiments would seem to indicate that there may be a three-fold inequality in so doing if we consider the interests of the property owner and the right of the man in the street, as well as the right of the tenants of both the old and the new buildings, to adequate daylighting.

We have all noticed the more cheerful and apparently lighter streets when the buildings adjacent to the streets are of the lighter colored materials now quite commonly used for facing our present day skyscrapers.

The recent completion of the 400 Madison Avenue Building, New York, which is completely surfaced above the first floor with light colored matt glazed (optically rough) terra cotta, afforded an excellent opportunity for making daylight tests to secure evidence which would satisfactorily substantiate this appearance of better lighting conditions.

The 400 Madison Avenue Building is located on the west side of Madison Avenue, between 47th and 48th Streets, while immediately adjoining on the same side of Madison Avenue and occupying the entire block between 46th and 47th Streets is the Ritz Carlton Hotel, the lower stories of which are limestone, surmounted by a conventional dark brick facade.

The Illuminating Engineering Laboratories of the General Electric Company conducted a series of photometric determinations simultaneously with two crews of observers on the center line of each block in order that lighting conditions might be exactly compared. Readings were taken at five different stations across the width of the street and results plotted for each station. The results for the five stations in each block were averaged



50%

INCREASE
in daylighting of facing buildings when light colored materials are used

Tests showing the amount of light reflected on opposite buildings by a dark colored building, and a light colored building indicate that zoning regulations should take into account the reflective power of exterior walls

and the per cent increase in street illumination in the new block plotted against time.

Owing to the fact that one building had set-backs while the other did not, elaborate computations were necessary in order to make corrections which would put the determinations on the same basis, but on the completion of the work a result was obtained which is most effectively illustrated in the accompanying chart.

Tests indicate that there may be as much as 100% more daylight in the street opposite a building faced with material having proper reflecting characteristics than in an adjoining block opposite buildings of materials without those characteristics; that the average for an entire business day from before nine o'clock in the morning until after five o'clock in the afternoon still shows an excess of 50% better lighting in the first block.

ON this chart it will be seen that slightly before nine in the morning there was approximately 45% more light in the street opposite the building faced with light colored materials. This percentage increased steadily, reaching a peak which at 11:40 showed practically 100% improvement. As the sun became more nearly vertical and passed over head the improvement naturally became less marked, reaching a level of about 30% at noon. This advantage was maintained for the balance of the afternoon, or until about 4:20, by which time the sun was well down in the west back of the buildings. There was then a slight falling off, although as late as 5.20 P.M. the tests showed a 20% differential in favor of the 400 Madison Avenue structure because of light reflected from the sky. If the buildings faced in the opposite direction, an approximate reversal of these values would follow, with a lower efficiency in the morning, the peak being reached in the afternoon when the sun struck the better reflecting surface. It should be noted that the time referred to above is daylight saving, and not standard time.

Another feature worthy of notice is that although the illumination on the street has been greatly improved by reflection from the surface of the 400 Madison Avenue building, there are no glare conditions resulting from direct reflections of images of the sun. These conditions are obtained because the surface is not optically flat and, therefore, although probably not sufficiently rough for maximum efficiency in reflecting a floodlight beam directed upward at a sharp angle onto it, this surface offers a very satisfactory compromise between maximum daylight obtainable in the street without glare and maximum artificial light returnable to the street, at night, if floodlighted.

A FURTHER factor which is worthy of consideration in zoning ordinances is the increased artificial illumination available on a street at night from a given set of street lights, when the light-reflecting qualities of adjacent buildings are similar to those of the building described above.

On many streets where there is a predominance of buildings faced with light colored materials, it is possible to take these desirable characteristics into consideration and effect a considerable saving in the amount of light necessary to produce a given effect either in the street or on the buildings themselves. There is an advantage to the city in that the annual cost of night lighting is materially less than if the street were entirely faced with dark colored buildings; the owner will find the cost of illuminating the outside of his own building, if he uses night illumination, considerably reduced while retaining the same intensity.

Unfortunately, buildings with light colored facades are usually in the minority on our older business streets so that the street lighting is necessarily designed for buildings faced with dark colored materials. In these cases, the light colored buildings become distinctive on account of their brightness as contrasted with that of their neighbors.

May we not then be justified in thinking that our zoning laws should recognize such a quality as that brought out so forcefully by these tests and encourage the improvement in daylighting conditions by possibly permitting the erection of structures faced with proper light-reflecting materials to somewhat greater heights before commencing the set-backs? The improved lighting in the street which would inevitably result would, of course, afford lighter and more attractive office space in the surrounding buildings so that all concerned would benefit: tenant, owner, and the man in the street.

WE NEED NEW MATERIALS

Harold Sleeper, who started the discussion about new materials with his article in the March issue, now explains his own ideas

AS THEY MAY BUILD ..in 1975

BY HAROLD R. SLEEPER

of the architectural office of Frederick L. Ackerman, New York.

MY picture of the Future Building rests on my belief that within this period vital changes in methods and materials will achieve definite goals dreamed of by every architect but now impossible of attainment because of the increasing cost of construction.

Beauty, usefulness and comfort have always been sought by the architects. Now and then we achieve beauty and usefulness, but comfort, in the broad sense of the word, is not being provided except in rare cases. With the lowering of costs I see our structures of 1975 possessed of all these attributes in good measure.

In order to meet the question raised by THE AMERICAN ARCHITECT as to what our buildings will be, I develop a moderate-sized structure of the future step by step through the various phases of building from excavation to roofing. If this proves the possibility of economy over present methods the reader can then imagine what the completed structure may comprehend of beauty, usefulness and even *comfort.*

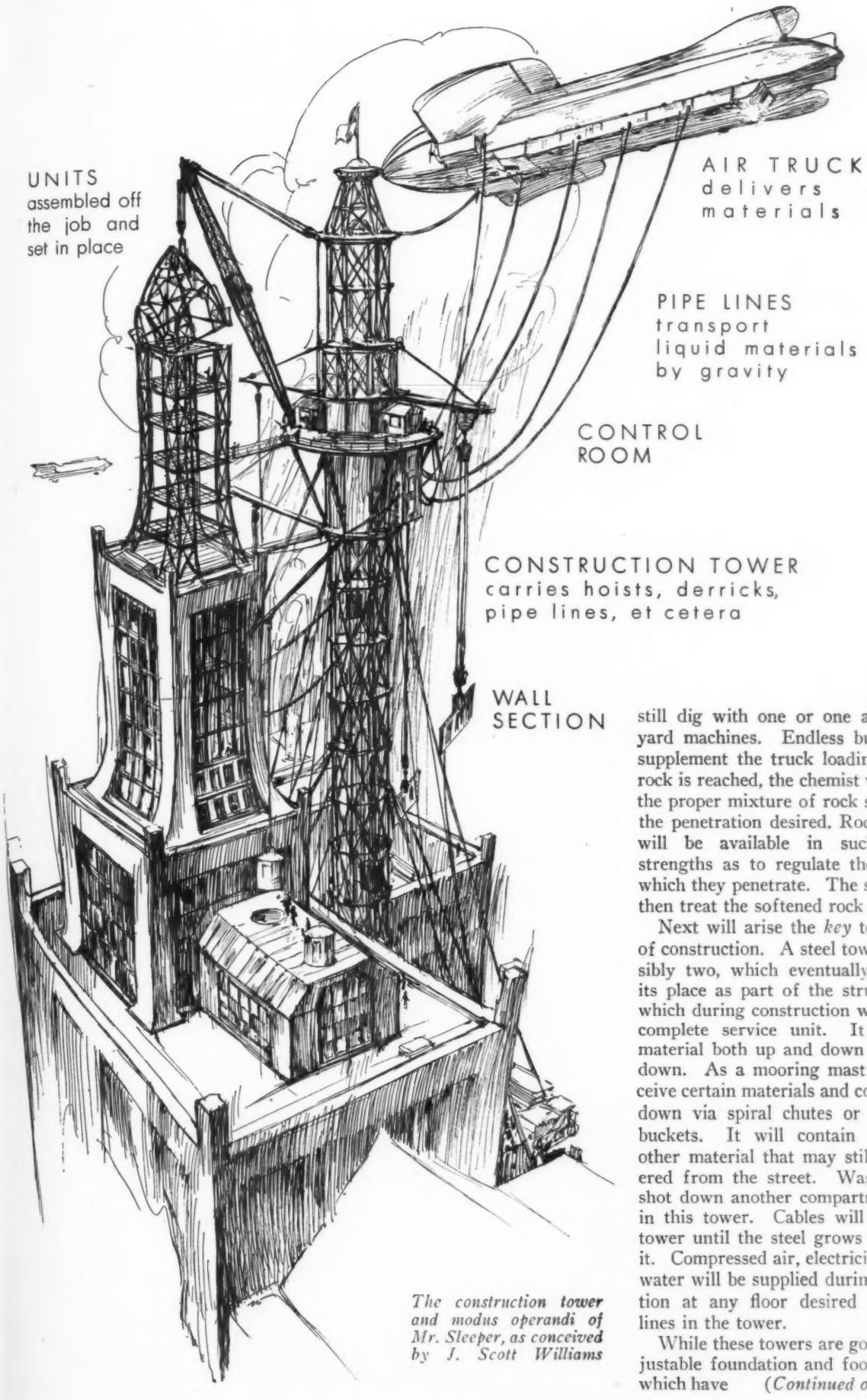
I sidestep any prophecy as to the size, height or depth of this building and I do not predict whether it is to be an urban or country site. Those points raise more questions than can be answered here. I assume that moderate-sized structures will always exist and methods and materials that will function on such a building can be used for larger and smaller work too.

Comfort for the human means more space for work, play, eating and sleeping than is now possible. Our building costs are so high that only the very richest individuals or larger corporations can have anywhere near enough elbow room by day or night. More room per person can be achieved only by making it possible to build more building for the same cost. The tendency now is to increase this cost rather than decrease it by the inclusion of a multitude of time-saving devices that must be installed to solve the servant problem. We are not advancing toward comfort, but toward existence as the law of "diminishing return" starts to function.

"Time," the modern fourth dimension, will play an important part in building economy, and processes must be developed that consider this vital element. Trends of modern life have established this fact in all machine processes, in most of the industries, but only partly so in building.

CONSOLIDATIONS and mergers are rife in business and industry, but as yet the fever has not attacked the contractor. There are very few businesses which could better stand a grouping of individuals to further economy. For instance, by lessening the repeated estimating, by pooling of equipment and by the saving of time job-chasing, builders would reap real savings. Until such mergers take place I see little hope of making any advance of consequence in building methods. Larger organizations could afford research laboratories and experimentation. They could develop shop drawing technique to a point where no cutting or fitting was expected to be done at the job.

The excavation will be done on our Future Building in one week. The bulky earth will be removed by a five to ten-yard shovel while smaller trimmers and trench shovels clear up the edges and footings. Such equipment has been invented and need only to be applied to this work. The steel and coal companies unload their ships with fifteen-ton clam shell shovels—we



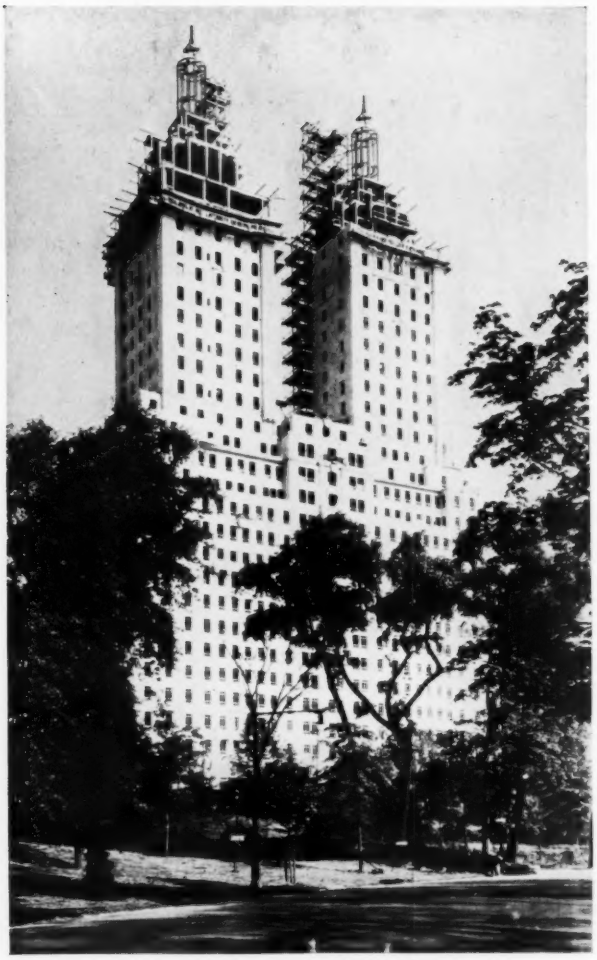
The construction tower and modus operandi of Mr. Sleeper, as conceived by J. Scott Williams

still dig with one or one and a half yard machines. Endless buckets will supplement the truck loading. When rock is reached, the chemist will supply the proper mixture of rock solvent for the penetration desired. Rock solvents will be available in such various strengths as to regulate the depth to which they penetrate. The shovels can then treat the softened rock as earth.

Next will arise the *key* to this type of construction. A steel tower, or possibly two, which eventually will take its place as part of the structure, but which during construction will act as a complete service unit. It will take material both up and down and waste down. As a mooring mast it will receive certain materials and convey them down via spiral chutes or in endless buckets. It will contain hoists for other material that may still be delivered from the street. Waste will be shot down another compartment within this tower. Cables will brace this tower until the steel grows up around it. Compressed air, electricity, gas and water will be supplied during the erection at any floor desired from pipe lines in the tower.

While these towers are going up, adjustable foundation and footing forms which have (*Continued on page* 92)

WHAT ARCHITECTS



TWIN TOWERS, *the first building of its type to be erected under the multiple dwelling law recently enacted in New York. The San Remo Apartments, Central Park West and Seventy-fourth Street. The building is 27 stories high, the towers containing nine stories. There are 129 apartments of from six to fourteen rooms. Estimated cost about three and a half million. Emery Roth, architect*

A.I.A. Issues Index to Filing System

World's Tallest Electrically Welded Building

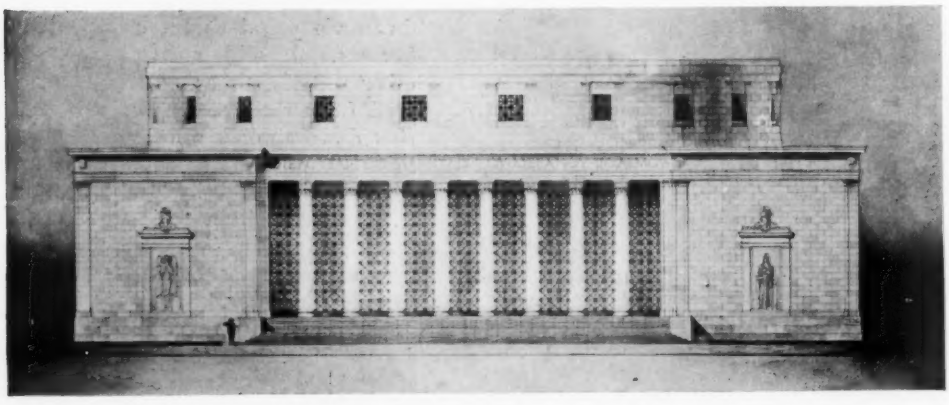
Aviation Will Revalue Real Estate, Says Joseph P. Day

REVALUATION of real estate through the progress of aviation is forecast by Joseph P. Day, a well known real estate expert of New York. In addressing the Aeronautical Chamber of Commerce recently he said: "Aviation will work a miracle in the revaluation of millions of square miles of land in the United States. Offices and factories will have their own landing fields, and suburban or commuting areas will extend at least 100 miles outside our great cities. There are thousands of acres of land that may be worthless today even as farmland, but on which aviation will place a respectable value for residential uses. The aggregate appreciation in the value of such real estate in this country will reach a staggering total."

STOCKS and bonds based on real estate will be listed with the Chicago Curb Exchange in cooperation with the Chicago Real Estate Board. The Board will have a listing committee which passes on a security before regular action is taken by the Exchange.

WHAT is said to be the tallest, all electrically welded building yet erected is being constructed for the Dallas Power and Light Company, Dallas, Texas. It is to be nineteen stories high. Lang and Witchell are the architects and R. L. Rolfe is the structural engineer. Frank P. McKibben has been retained as consulting engineer in connection with the welding.

A NEON obstruction marker has been placed on the top of the Cathedral of Learning, University of Pittsburgh, in order to demonstrate the protection it affords tall unlighted obstructions from low flying airplanes. It is visible at night for about five miles and suggests a means of protecting tall chimneys, monuments, broadcasting antennae,



THE ACROPOLIS *will be faced by a War Memorial and Community Center designed by Harry E. Warren, A. I. A., recently approved by the Venizelos Cabinet and to be erected on land set aside by the Greek government. A feature will be an auditorium seating* 4,000

ARE TALKING ABOUT

Cathedral of Learning Protected Against Airplanes

Real Estate Stocks Listed on Chicago Curb

Athens to be Remodeled and Redecorated

bridges, etc. This marker was designed by R. E. Marbury of the Westinghouse Electric and Manufacturing Company.

ONE square foot of parking space for every four feet of rentable office space is the prediction of N. H. Owens, Montreal, chairman of the downtown garage committee of the National Association of Building Owners and Managers. He says, "It is my belief that we are coming back to more and smaller garages in the downtown districts of cities on the North American continent. Years ago we used to drive up to a store and tie our horse and buggy to a hitching post. That was real convenience. The flooding of the country with automobiles made that an impossibility, and in our haste to do something about it we provided large garages, which are not so convenient because of the time it takes to park the car in a garage and then walk three or four blocks to our destination."

CONTRACTORS and builders doing more than $25,000 worth of construction work last year numbered between 75,000 and 100,000, according to Dr. Alanson D. Morehouse, Chief of the Construction Section, Distribution Division, Bureau of the Census. An accurate count is expected to appear shortly.

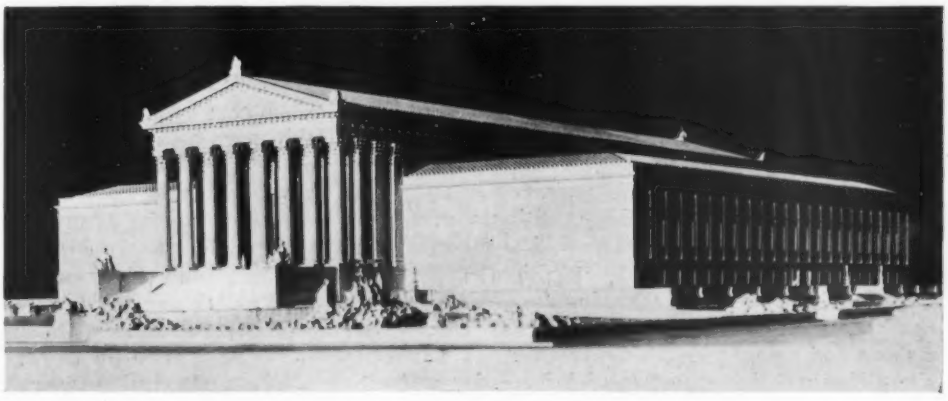
AN alphabetical index to the standard filing system of the American Institute of Architects has been completed. Documents relating to the filing system may be obtained by addressing Edward C. Kemper, executive secretary, The American Institute of Architects, The Octagon, Washington, D. C.: "The Standard Filing System," 50 cents; "The Alphabetical Index to the Filing System," 50 cents; and "The Standard Filing System and Alphabetical Index," which are bound together in one volume, $1.00.

NIGHT-CLUB *room on the S.S. Leviathan. Ceiling lighting consists of metal troughs, having aluminum reflectors, suspended under triangular shaped ribs. Lamps are blue, amber, red and white, and are operated by dimmers.*

ATHENS, Greece, is to be remodeled and redecorated so as to give it the appearance of a full fledged modern city. The plan developed includes an abundant water supply and sewerage system. The cost as it is estimated at present will be about $25,000,000.

"A POORLY planned building is forever a wasteful and uneconomical one," states G. Richard Davis, a New York real estate man. "Obsolescence—which means passing out of date and not meeting the needs of the times—occurs more readily in poorly planned buildings than in carefully planned ones. Look at the apartment houses built twenty years ago and you will see how the rents in the well planned ones have held much better than those poorly planned! The office building of two decades ago which is now obsolete cannot compete with the new office building.

"IN France we have a marvellous system for the evacuation of garbage that you do not know yet in America," states Mlle. Paulette Bernege, (*Continued on page* 86)



SUPREME COURT *of the United States will be housed in this structure, designed by Cass Gilbert construction on which will be started shortly. It will face the Senate-wing of the Capitol. Cost estimated to be about ten million dollars*

ROCHESTER SOCIETY OF ARCHITECTS

USES Newspaper Advertising . . .

TO SELL "The Man-in-the-Street"

By BERNARD HEATHERLEY

Chairman, Committee of Public Information
Rochester Society of Architects

AFTER lying dormant since Mr. Brockway of Syracuse carried out a program of publicity regarding architectural services in the Syracuse newspapers some years ago, the matter of group advertising was brought up for discussion at a meeting of the Central New York Chapter of the A. I. A. at Binghamton in the Autumn of 1928. It was referred to the following January meeting in Syracuse and then discussed at some length, information obtained in the meantime from the Pittsburgh architects, who have been carrying on a fine campaign, being presented.

The Chapter decided that in its opinion newspaper advertising of the architect's functions and services could be carried out in such a way as need not offend the most delicate sense of ethics; it decided that it desired to see such advertising started and that it was necessary under present day business conditions. On further discussion it was decided that, as the Central New York Chapter is composed of the architects of six or more cities, meeting in each city in rotation, the matter could be dealt with most effectively by the various local organizations—the Chapter Committee existing for the interchange of ideas and material between the different groups.

Shortly after this meeting of the Central New York Chapter the subject was introduced at a meeting of the Rochester Society of Architects and discussed pro and con. Mr. Harry Goodwin, member of a large advertising firm, was requested to address the meeting. One of the most salient points he brought out in answer to consideration of the ethics of advertising a profession was that most objections based on ethical grounds come from a confusion between "advertising" and "merchandising." He said that the thing the professions fear to embark upon is *merchandising*—such as is carried on by shops and manufacturers. Advertising is something quite different, being a system of information and education—not a blatant appeal for attention. The speaker told the meeting something of the theory of making a public appeal and gave some ideas of newspaper publicity rates.

It was then voted to embark upon a Public Information Campaign and a committee was formed to confer with the local newspapers.

From this time on, what William Harmon Beers has achieved with the New York Herald-Tribune comes to appear more and more as a miracle. The position of our local newspapers, after welcoming the step the profession was taking, was stated thus: "We live and exist through the sale of space in our newspaper. It is no more logical or just for you to ask for free space than for us to ask you to make free plans. But whenever the professions (not only architecture) have been approached with a view to their paying for some publicity, they have immediately raised the question of ethics. We notice, however, that when free publicity is to be had, this point about ethics goes by the board. This isn't fair. We are willing to do a great deal more than merely supply you with the space you pay for, if you will recognize that our space is the commodity we sell to live by.

"We have the experience of the surgeon who telephoned to say he had just performed an operation on a prominent man. He urged us to be sure to mention in this news item *who* performed the operation—and spelt out his name to be sure we had it right. Another example of the requests we get for free advertising is furnished by the professional man who telephones the society editor to the effect that he has returned from his vacation and will resume practice at such and such an address. These things prove that the professions want publicity and want news space. Can they be surprised if we ask a price for them?"

The local morning paper (*Continued on page 74*)

Contract for Building Made By 'Architect'
Standard Form of Conditions Used; Protects Owner
Plans, Specifications Held No Good Building Guarantee; 'Architect's Services Advised
Architect Aid to Attractive Home Building
Architect's Services Prove of Value to Builders
'English' Type Architecture Is Misnomer
Architects Opposed To Borrow Name For Design
FACTORY
LIGHT & AIR
WHO TOLD YOU?
Urge Service of Architect In Building
Takes Care of Many Points to Interest of His Employer
Aesthetics of Architectural Design Today
Begin with Designs; 'Honesty,' Fitness Are Factors
Honesty of Expression in Buildings Necessary; Design Should Start from Inside
Proper Plan Necessary for Modern Home
Speculative Building
Architecture Keeping Pace With Demand
Contributes Largely To Efficiency and Comfort Today
10 Reasons for employing an ARCHITECT
REASON NUMBER 9
An architect can design a building which permits lowered insurance rates. A building designed by an architect has a higher resale value, and architect's fees should be included in
10 Reasons for employing an ARCHITECT
Reason No. 1
The architect studies each job as a special problem, obtaining an individual solution and developing the full benefits that a lot may offer. He does not believe that "any plan on any lot" makes for satisfactory results.
10 Reasons for employing an ARCHITECT
REASON NUMBER 10
It has been proved that the savings in building costs effected by employing an architect have more than paid for architectural services.
10 Reasons for employing an ARCHITECT
Reason No. 4
addition to drawings ich show just how the ished work will look, architect writes and rnishes specifications or each job, which state minute detail the quanities qualities of all mate hat go into the
ROCHESTER SOCIETY OF ARCHITECTS
EMPLOY AN ARCHITECT

ROCHESTER ARCHITECTS USE SALES COPY

1. . . Small advertisements in newspapers present strong arguments.
2. . . Publicity articles explain what an architect can do to serve a client or save him money.
3. . . Booth in Home Show emphasizes, "Employ an Architect."

RESULTS DESIRED. . . Not an abstract public interest in architecture but the creation of an active public desire to "Employ an Architect."

. . As It Looks

Acoustics for Apartments

THE psychological effect of noise is so acute a problem in city living that it is time for steps to be taken in building construction which will eliminate as much of that noise as possible. Although the better class of multiple dwellings are at least fairly well soundproofed as regards walls and floors, little attention has been paid to deadening the sounds that come in through open windows. Often there is more street noise indoors than outdoors, with the result that apartment bedrooms are anything but peaceful at night. The proper acoustical treatment of walls would do much to deaden such sound and make the apartments more livable, and rentable at a higher figure.

A New Service for Our Readers

IN this issue THE AMERICAN ARCHITECT inaugurates on page 110 a new department for the benefit of its readers. Many requests are received from architects and draftsmen for a wide variety of information. These requests vary from men who want jobs to men who require additional help or want to dispose of or secure books and magazines. This department will be conducted without charge to the readers of this journal. Requests will be printed in the first issue in which space is available and replies received at this office will be forwarded. THE AMERICAN ARCHITECT desires to be as helpful to its readers as possible and it is with this in mind that this new department is added as a regular feature.

Garages for New York Apartments

A PROPOSAL to permit garages in New York apartment houses has been advanced by the Walker committee. Yesterday people would not move into a neighborhood where there were garages. Now they will not move into the neighborhood if there are not garages. The change in thought is a direct result of modern living conditions. People will drive cars, and they have no patience with long travel to and from a garage.

Many garages, not only in New York but in other cities, are paying little if any return on the investment because the high rentals necessitated by obsolete building requirements drive patronage away. Garages should by all means be soundly built, but vexing and unnecessarily expensive restrictions should be dispensed with at the earliest possible date. Properly designed garages are today needed to serve the community.

Chicago Doctors Urge Advertising

STATES an editorial in the official bulletin of the Chicago Medical Society: "We must get publicity for the profession. If medicine were a trade or an industry, the members of the profession would long ago have formed and financed an association that would have adopted a nation-wide publicity and advertising program costing millions. It would have been like the reaction of the candy manufacturers to the cigarette slogan. Publicity is, however, much less expensive and could be obtained at a cost that would make it worth while both to the profession and the public."

Reference Book Slurs Architect

"ARCHITECTS are apt to be too artistic unless restrained by what the man in the street calls horse sense." That is the last sentence on page 268 of the fifteenth edition of the "Building Estimators Handbook," by William Arthur. Here is an author who has written an excellent book of its kind, which incidentally is intended for use by architects as well as others, and yet he goes out of his way to cast a slur on the architectural profession. A statement like that might have some excuse in a book not of a reference nature, but it absolutely does not belong in an estimating book any more than would slurs on owners, contractors or workmen. It is to be hoped that Mr. Arthur will, in his next edition, blue pencil any such statements which are, to say the least, in bad taste.

Watermelons and Architects

LAST summer Francis Wilmot, of Sumpter, S. C., shipped two carloads of watermelons. Each car was of equal quality, each melon had been picked the same day. The melons in one car were labeled, "Wilmot Plantation Watermelon." On the melons in the other car was—nothing. The labeled carload sold at the same auction for one hundred dollars more than the other. Cost of labels, $2.85. This sort of story is an old one to advertising men but a new one to architects. The advertised product or the advertised service is, somehow, regarded as being worth more. It is quite possible so to advertise the services of the architectural profession that it will be considered a faux pas to construct any building without the employment of a competent architect.

Beauty of Petrol Filling Stations

PETROL filling stations, as the British have it, are not quite all right unless they have a bit of the artistic about them. Or at least so feels "The Builder" of London, which urges its readers to buy only at petrol stations which maintain a decent appearance. The publication comments upon the generally higher artistic standards and feels that countryside conditions would be far more aesthetic if the motoring public would lend its encouragement to improvements.

Certainly, at least in this country of ours, the better the appearance of the gasoline station, the greater the trade. Our love of beauty has been awakened within the past few years and we will spend our dollars in the most pleasant surroundings. One might well say that today the average filling station presents a more attractive exterior than the food shop. There are still hundreds of thousands of merchants who have to be taught that good architecture pays.

to the Editors . .

Architect Finds New Material

IT is interesting to note that an architect is responsible for the introduction into the building field of the chrome nickel steel used for the tower and other parts of the Chrysler Building. K. G. Reynolds, an architect of Albany, N. Y., was retained to do some remodeling work for the Ludlum Steel Company which makes Nirosta KA2 steel. He sensed the possibilities of the material in the building field and suggested that here lay a big market awaiting development. Rather to his surprise, he was retained to introduce the metal to the architectural profession.

There are many companies which would do well to follow this example. Not only would products probably be improved, as well as the manner of their use, but information of the sort that architects want for the intelligent use of those products would be more likely to be forthcoming. Another important fact is that a well-trained architect with an investigative turn of mind is an almost ideal person to seek out and develop new uses for building products, an added activity that might well produce profits far in excess of his salary. It might be said to be almost axiomatic that every company selling a product used in building construction should have a capable architect on its staff.

Dissatisfaction with Good Material

A GOOD material ceases to be a good material unless it is properly used. The tendency of building material manufacturers to realize this is shown by a new service announced by the Cook Paint & Varnish Co., which states ". . . we not only guarantee materials when Cook's Products are used, but insure satisfactory results. This we do by working with architects, painters and owners to see that Cook's Products are applied in the manner which our experience teaches us is best. . . . We know that the service a paint gives depends upon the manner and the conditions under which it is applied—and the purpose of Cook's Field Service is to give the painter the benefit of our own experience in the use of Cook's Products."

Many manufacturers, particularly of building equipment, are glad to advise on the proper use of their products. It is gratifying, though, to see a manufacturer advertise satisfactory use by a logical system of following through the sale to the final application.

The Public Needs to Know

PUBLICITY of architecture directed to the general public has many angles. The beauty of good architecture, its value to the owner and the community, and the advantages of employing an architect are among the many features that are apt to be stressed because they are important. But there are other phases of building that are important and that should not be overlooked or underestimated. Among these may be mentioned the importance of employing a responsible contractor, the disadvantages of selecting an architect by means of competitions, and the value of quality construction.

The public generally entertains the idea that by purchasing a set of plans and specifications and engaging an architect to supervise the work any contractor, so long as he is cheap enough, will produce a satisfactory job. Every architect knows the fallacy of this. Architects also know the unsatisfactory results that more often than not occur through that ancient relic known as a competition. The injury that accrues to the profession and the cost to the client of using cheap construction is also well known. In the end the owner pays what good construction would have cost in the first place. Much grief and expense can be saved by building well in the beginning. The public should be told the facts.

Old Buildings Still Profitable

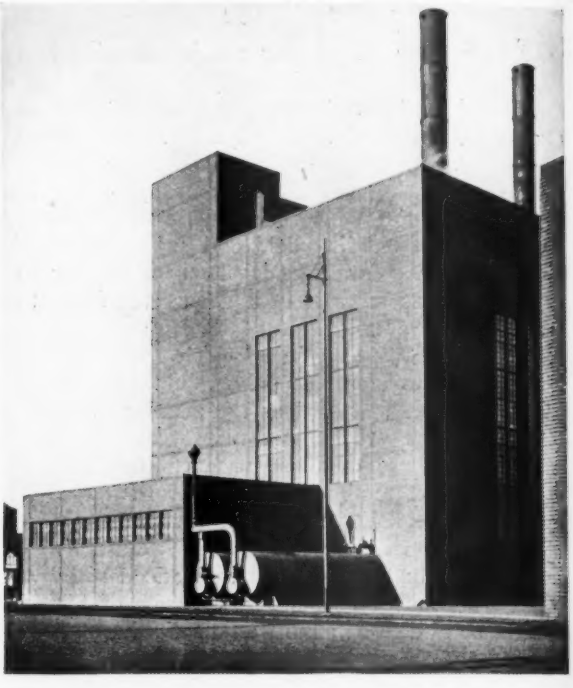
WITH all the skyscraper construction in the Grand Central Zone of New York City, it is remarkable to learn that the old building at Forty-second Street and Fifth Avenue will probably not be torn down for many years. Improvement of the property has been considered but conclusion of the owners has been that no new building will equal the return on the old building when revenue from the advertising signs on it are taken into consideration.

Chrysler Architect Sues Owner

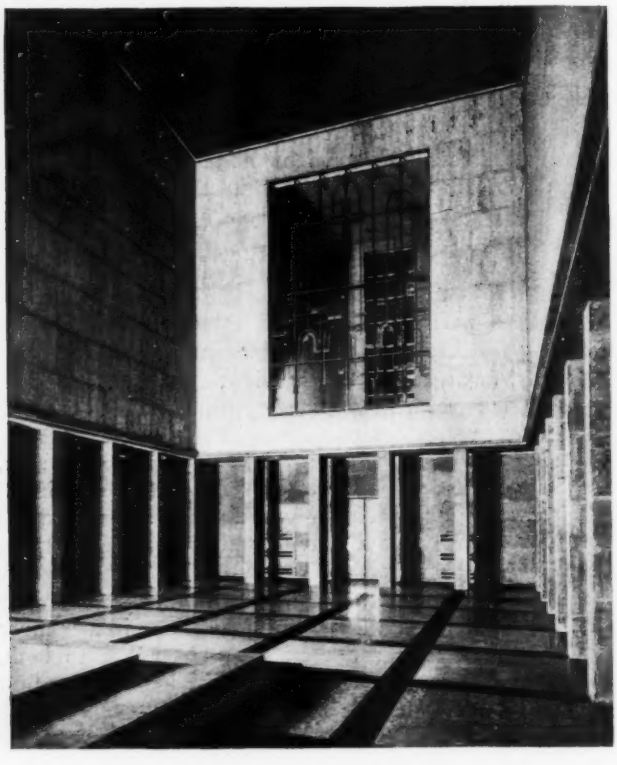
NEED for an exact understanding with the owner, so often the cause of unpleasant misunderstandings between architect and client, received nation wide emphasis when William Van Alen, architect for the Chrysler Building, filed a mechanic's lien against the W. P. Chrysler Building Corporation. Mr. Van Alen claims six per cent of the cost of the Chrysler Building, which amounts to a total fee of $865,000. Mr. Chrysler, according to newspaper reports, said that he would not pay any such fee and offered $175,000. Mr. Van Alen's attorney, in a newspaper interview, stated, " There was no specific agreement for the payment of the architect." And there, regardless of the merits of the case, lies the root of the whole trouble. It is easy enough to ask now, "Why was not the fee fixed in the very beginning?" There were quite probably good enough reasons as to why Mr. Van Alen and Mr. Chrysler proceeded without a specific agreement. Good though those reasons may have been, yet the fact remains that architect and owner are not winding up their business dealings in a manner satisfactory to either one of them, let alone to both. Had a specific agreement been arrived at in the first place, though it might have been troublesome at the time, Mr. Van Alen and Mr. Chrysler would now be operating on a friendly, pleasant basis profitable to both. This case should be a lesson to other architects who are inclined to depend on their artistic rather than on their business ability, for no client wants to start an operation which may wind up in a law suit.

....and ABROAD

Clock-jacks twelve feet high crown a new bank building in Leipzig. Prof. Wackerle was the sculptor. The bodies of wrought copper turn from the hips upward to strike the hour with hundred weight hammers. "The Archtiects' Journal," May 14, 1930

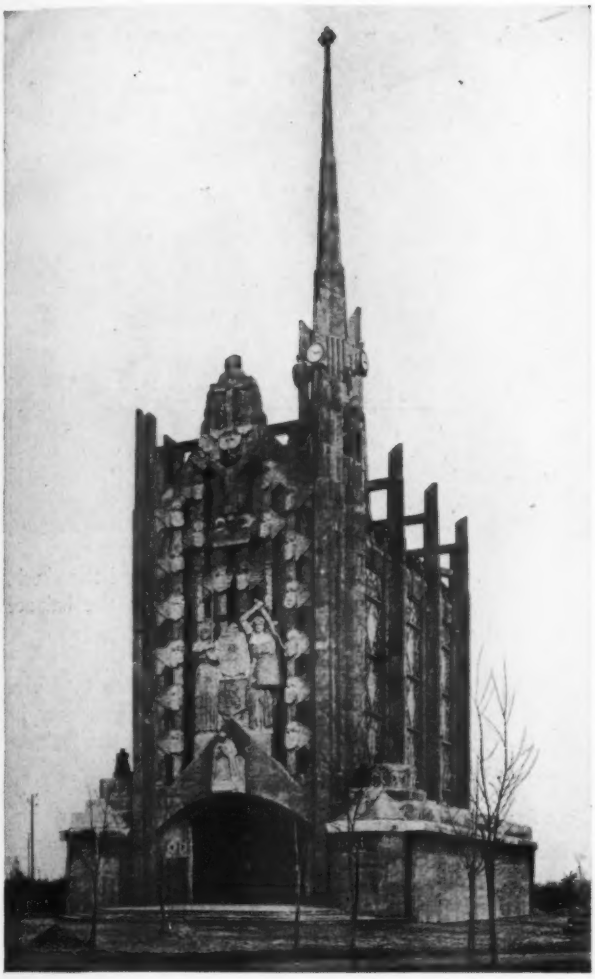


The wide expanse of brick wall surfaces are broken by a pattern of horizontal and vertical lines and effectively placed and proportioned fenestration in the central coking plant of the gas works at Nordstern. The main boiler house is shown above. From the April, 1930, *issue of "Baukunst"*



Main room in the chapel of Southwestern Cemetery at Essen. The chapel is the dominating building of the group composing this modern development. Herr Bode, consulting architect. From the February, 1930, *issue of "Deutsche Bauzeitung"*

Two sections of the rail in the main stairhall of the Justice Building in Hamm in Westphalen, Germany, designed and executed by Carl Wyland of Cologne. Herr Warnemunde of Hamm was the architect. From "Moderne Bauformen" issue of May, 1930



The Church of St. Therese de L'Enfant Jesus at Elisabethville, France, designed in concrete by Paul Tournon. The sculptured work is by Sarabezolles. The west front of this church shown above is from the "Architect & Building News"

Corner cupboard designed by Duncan Grant. The predominating color of the panels is grey-buff with accents of blue. Maroon, apple-green and scarlet have been used in the border. The maroon and green rug was designed by Douglas Davidson. From the "Architectural Review," May, 1930

Horizontals broken only by posts supporting the balconies are the basis of the design of the Royal Corinthian Yacht Club, Burnham-on-Crouch, Essex, England. Joseph Emberton, architect. From the "Architects' Journal" for May 7, 1930

"The Drama Through the Ages" is the title of the frieze designed by Gilbert Bayes for the Saville Theatre, London. These panels are characterized by movement handled in a strong, vigorous manner. From "The Builder" of London, issue of May 9, 1930

He cashed the check . . . and then SUED

By George F. Kaiser

WHAT HE DID. When a local power company entered into a contract with Agnew for the preparation of the plans for a power plant building it was provided that Agnew was to receive 4% of the cost of construction and that his compensation was to include his services as superintendent. The plans contemplated a building to cost $9,000.00. When the first plans were not satisfactory, new plans were prepared by Agnew. Finally a building was completed. The plans provided for a concrete mat or foundation 2 feet thick under the whole building at a cost of $1450.00. Finally the architect rendered a bill for 4% on the estimated cost of the building under the first plan, the actual cost of the building under the second plan, and the cost of the concrete mat. The client refused to pay the bill as rendered but sent him a check for 4% of the actual cost of the building and concrete mat, marked however, "In full settlement of all accounts." Agnew, instead of returning the check and insisting on what he thought he was entitled to, cashed the check, and wrote the client he was applying it on the balance he claimed was due.

WHY HE DID IT. Agnew did not want to give up the check he already had received and anyway he thought it made no difference as regards the balance he claimed was due.

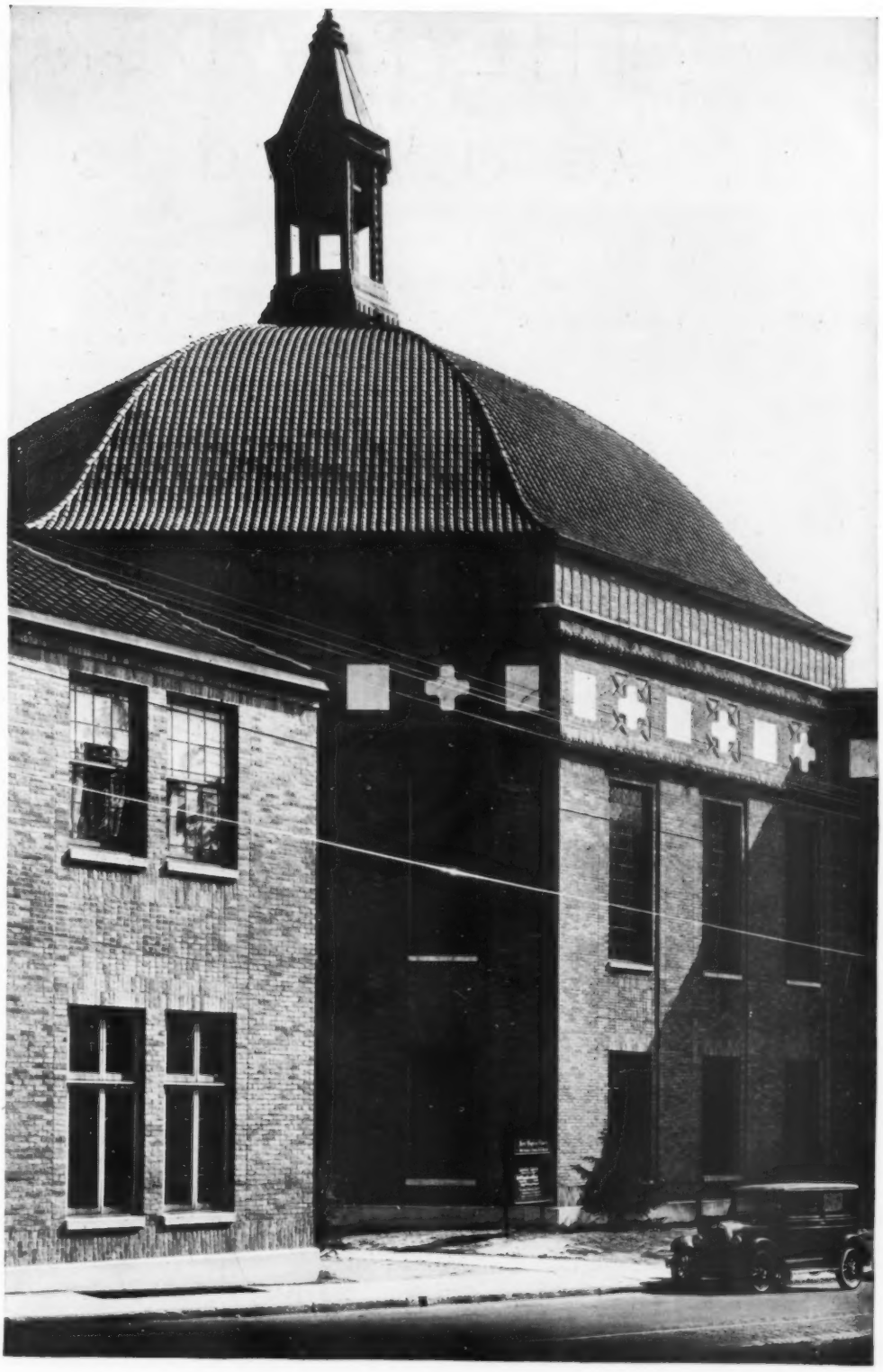
WHY HE SHOULDN'T HAVE DONE IT. Where the owner of a building sends to the architect who drew the plans for the building a check with the words, "In full settlement of all claims," upon its face, the check being for only a part of the architect's demand which is unliquidated, the acceptance and cashing of the check operates as an accord and satisfaction, and the architect, having used the check, is precluded from suing the owner and recovering any further balance he may claim to be due.

When Newspaper Libels an Architect

WHAT HE DID. Allen, in his professional capacity as an architect, had drawn the plans and specifications for and supervised the erection of many large and important buildings. Finally, when a new high school was proposed, Allen was retained to draw the plans and specifications for it and to supervise its construction. He did this, and the local school board accepted the building and used it for school purposes. Then one day Allen was amazed and outraged to read the following in his local paper. "This town has a new $750,000 high school which was first used when the fall term began. Yet the pupils of the same high school are in peril because of conditions which have come to the attention of the school board. The roof is in danger of falling. One portion of it has broken away from the beams and has sagged toward the floor. At present the roof is propped up, but if it should fall, it would be dangerous to life and property. The architect has been notified, but has ignored the notification. An expert has been sent for and precautions have been taken. This development does not speak very well for those who designed and built the new high school." Allen hastened to call upon the newspaper editor and demanded a retraction. "Retract nothing," exclaimed the editor, "We won't retract anything for everything we say is true."

WHY HE DID IT. The editor thought that the fact that the matter had been discussed at a school board meeting, and was at least partially true, protected him from a suit for libel.

WHY HE SHOULDN'T HAVE DONE IT. When Allen sued the paper for libel and recovered a substantial judgment against the paper, the editor realized that he shouldn't have done it. The court, in deciding that the architect was entitled to substantial damages, said, "A newspaper reporter may report everything that occurs publicly without fear of any action provided only that his reports are fair and accurate and not interspersed with comment of his own. He must add nothing of his own. He must not state his opinion of the conduct of the parties. Obviously where a libelous act shows on its face that it is not a report of any public proceeding, but purports to be the publisher's own statement and comment, a defense of privilege is unavailing."



● Unique among American churches is the new First Baptist church at Asheville, N. C. Its architect, Douglas D. Ellington of that city, roofed it with IMPERIAL Spanish Tiles, variegated.

LUDOWICI-CELADON COMPANY

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THE READERS Have a Word to Say

• WHY NOT ACTUALLY SELL OUR SERVICES

Editor, THE AMERICAN ARCHITECT:

To my mind the problem that confronts the architect of today is not so much that of selling architecture to the man in the street as it is that of selling the value of an architect's services. There are many who would say that these are one and the same thing but I do not think this is true.

The profession of the architect has long been an honored one, but there is such a thing as being so respected as to place one's self on a pedestal and being untouchable. To most people the architect is not only highly respected but he is also such a mysterious individual as to be almost set apart from his fellow creatures. This condition, the architect has brought on himself.

Everyone knows how the doctor or lawyer functions in his profession but the knowledge that the general public has regarding the architect is so nil as to be almost laughable. Yet who can blame them; no one has educated them to it.

Upon introduction to strangers I have, in the course of conversation, been asked as to what business I was in. On my reply that I was an architect I have had the most ridiculous questions hurled at me. I always patiently answer them all and sincerely try to educate the questioner as to how the architect functions in his profession. The knowledge of the average individual regarding an architect is usually limited to the idea that he makes blue prints and pretty pictures.

In the course of my travels I have enjoyed watching the reaction of people to the information that I was an architect, and I have studiously and carefully pondered over it with these conclusions: The average man or woman thinks that the architect is a high priced specialist and an unnecessary evil. Also that he is an aristocrat rolling in the wealth derived from the enormous profits of handling buildings costing thousands of dollars—"don't laugh."

On the other side of the picture is the idea the public has that in reality the architect knows nothing but thinks he knows everything.

The architects have built a Chinese wall around themselves and are now having a hard time tearing it down. There are those in our ranks who think that it is necessary to put on a lot of dog, talk through the nose and look very dignified, also lock themselves behind well guarded doors and sit and wait for the clients to pour into the office. This type would abhor soliciting business; to advertise would be degrading to the extreme. Unfortunately this type has quite a bit of authority in the architectural societies and will have until the younger element displaces it and goes out after business in a he-man fashion.

Direct advertising done under the auspices of the various architectural societies is the only way to sell architecture to the people. Traveling architectural exhibits are good, but where does the man in the street get any direct idea of how the architect functions in his business or profession, call it what you will, from looking at beautiful water colors or splendid projects. Most of us are in the profession because we love it but that does not buy the baby shoes. If the public has only respect for the architect and nothing else where does the money come from to pay the rent?

Again I say that architects must collectively broadcast their wares in the newspapers and magazines and they must keep everlastingly at it. They must expound specifically what the architect does and just where the client can save money by going to the architect. This is a bargain age and the public wants to be shown in dollars and cents just what they get—first value, and then price.

When we do this, then, and then only will we begin to feel that we have arrived as a profession.—*Jacob Lewis, architect, Chicago, Ill.*

• A LAYMAN TELLS WHAT HE THINKS OF ARCHITECTURE

Editor, THE AMERICAN ARCHITECT:

With such little training as I have, and academic as it may be, I fail utterly to appreciate the large majority of the work done by reputable trained men these last few years.

Daily the Chrysler Building stares at one—could anything be more undignified, more weak in design and intention, more uninspiring, if not unaspiring, as a combination of money and architecture! Or take the new London Terrace buildings: they remind me of desiccated slices of liver, uncooked and unsung.

The New York Life Building, seen from several angles every day, more nearly approaches in my mind what architecture can be, but here too the feeling of soaring and aspiration gives way to one of strength superimposed by the head-dress of a Siamese dancer or perhaps one of Ziegfeld's gilded adornments.

The New York Central Building seems pregnant far too high in its structure—no human body was ever so broad and no head so small. And here was a natural gateway surely intended to bear the beauty of real architecture: mass without weight, grace without mincingness, adornment without grotesqueness.

There are countless commercial buildings throughout the city less imposing, less important perhaps, but buildings that do block out sunlight and green trees and offer no substituted beauty in return. Domestic work is about the same, whether it is the large apartment house or small urban dwelling. The new should not replace the old unless it has something new and better to offer.

Modern work is more (*Continued on page* 110)

STRUCTURAL STEEL CREATED THE SKYSCRAPER

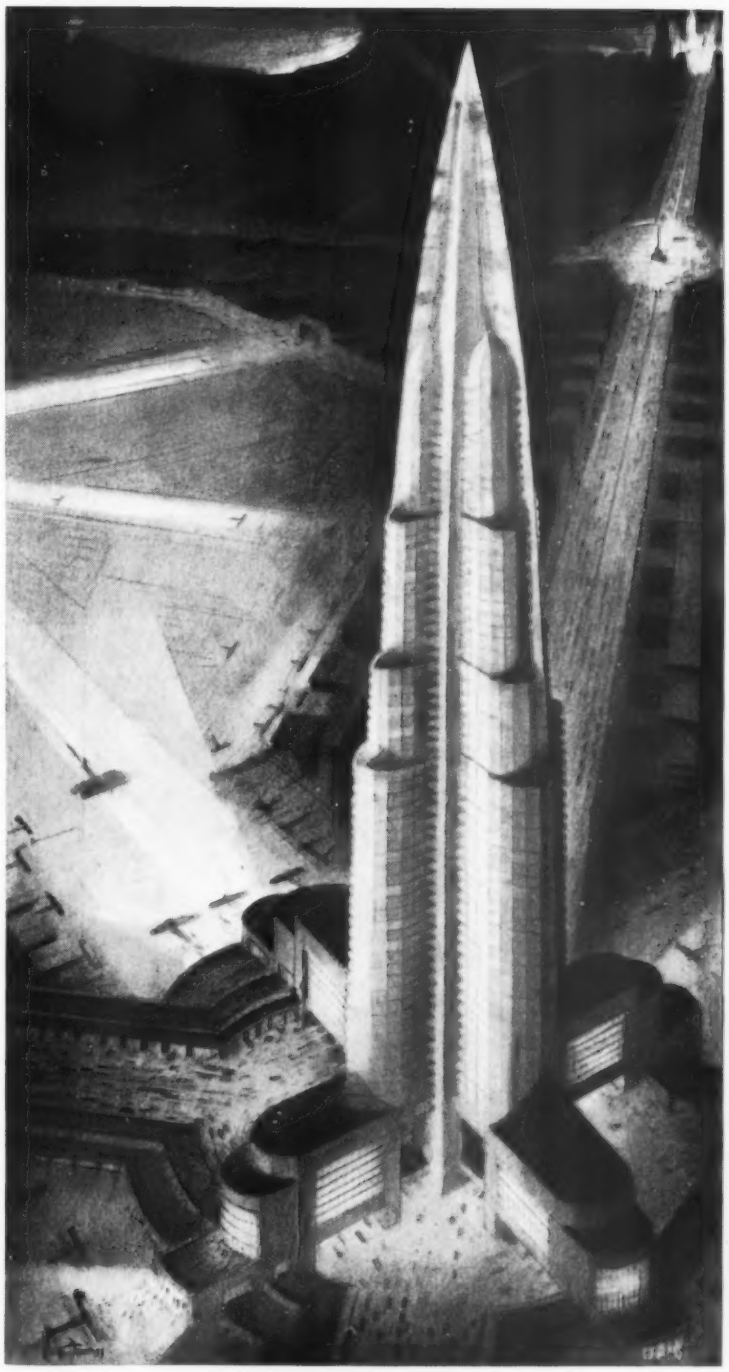
STEEL REACHES INTO THE FUTURE

A MULTI-MOTORED metal plane sweeps skyward on its scheduled flight! . . . A metal spire is swiftly thrust to record heights—on time, as specified! . . . To be sure, the mighty frame of structural steel is firmly rooted in solid stone . . . yet, because they are extending man's horizons, both plane and skyscraper are kin.

Steel reaches into the future as no other fire-resistive material does or can . . . is ready with its full strength and adaptability, its great security and economy, for all tomorrow's wants. Meanwhile there is pressing need for steel construction in smaller buildings—in homes, apartment and mercantile houses, schools, industrial plants and small bridges.

Here, also, steel saves building time and material—provides more floor space with less weight, less bulk—secures quicker returns on investments and longer usefulness.

Before building anything find out what steel can do for you. The Institute serves as a clearing house for technical and economic information on structural steel, and offers full and free co-operation in the use of such data to architects, engineers and all others interested.



"AIRPORT OF THE FUTURE"—IMAGINATIVE DESIGN BY HUGH FERRISS. AN ENLARGEMENT, ON SPECIAL STOCK FOR FRAMING, WILL BE MAILED WITHOUT CHARGE TO ANY ARCHITECT, ENGINEER, OR BUSINESS EXECUTIVE.

The co-operative non-profit service organization of the structural steel industry of North America. Through its extensive test and research program, the Institute aims to establish the full facts regarding steel in relation to every type of construction. The Institute's many publications, covering every phase of steel construction, are available on request. Please address all inquiries to 200 Madison Avenue, New York City. District offices in New York, Worcester, Philadelphia, Birmingham, Cleveland, Chicago, Milwaukee, St. Louis, Topeka, Dallas and San Francisco.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

STEEL INSURES STRENGTH AND SECURITY

ARCHITECTURE
ALLIED ARTS

BOOKS

ENGINEERING
BUSINESS ECONOMICS

Storefront of perfumery shop, Paris, Ch. Siclis, architect. From "Contemporary Art Applied"

Contemporary Art Applied to the Store and Its Display

By Frederick Kiesler. Published by Brentano's, Inc., New York. Illustrated; 158 *pages; size* 8¼ *x* 11 *in. Price* $7.50.

A BOOK in which every illustration is unusual. Written, as stated by the author, "because the country has been flooded with examples of poor and distorted modernism; because the sudden influence of contemporary art makes it necessary to control its real value; because the new beauty must be based on efficiency and not on decorative cosmetics; because the established store is facing the problem of changing its front, its windows, or both, and probably its interior, too. It has to select designs and is not trained in the new art; because the store window is a silent loud speaker and not a dead storage. Its language appeals to everybody and has proved to be the most successful Esperanto for promoting merchandise; and because good contemporary art will last—just as all good styles in previous periods of history have endured."

The author, in discussing modern art and architecture, presents many interesting ideas that are food for thought. His twenty chapters give an excellent idea of the most advanced modern art. All in all, the book is one which every architect interested in modern work will find of stimulating value.

New Building Estimators' Handbook

By William Arthur. Published by Scientific Book Corporation, 15 *East 26th St., New York. Illustrated;* 1024 *pages; size* 5 *x* 7⅛ *in.; price* $6.00.

THE fifteenth edition of a well known handbook for architects, builders, contractors, appraisers, engineers, superintendents, and draftsmen. It contains 600 tables and 480 illustrations. The tables are worked out on a flexible basis so as to be of value for various wage scales. Considerable space is devoted to the time required to install materials, it being so presented that any rate of wages can be applied. In order to show the practical application of data to actual construction, reference is made to fourteen buildings of various types.

The book is intended for those concerned with buildings of twenty stories and less, which comprises the vast bulk of the building done in this country. The material, presented in a concise, readable form, is accompanied by a comprehensive index that facilitates reference.

Dining-rooms, Digges House, Yorktown, Va. From "Colonial Interiors"

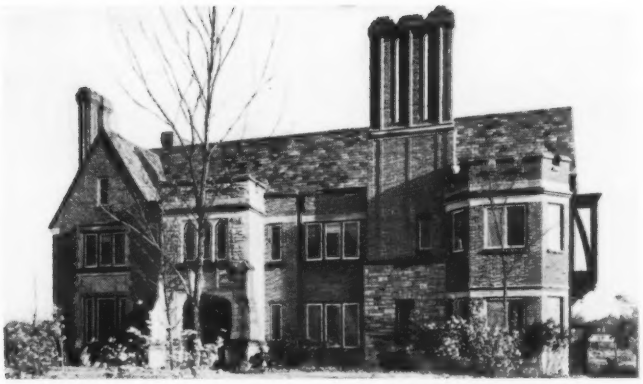
Colonial Interiors, Second Series

By Edith Tunis Sale. Published by William Helburn, Inc., 15 *East* 55*th Street, New York. Illustrated;* 159 *plates and measured drawings; size* 9½ *x* 13¼; *price* $15.00.

ILLUSTRATION of the early architecture of Maryland, Virginia and North Carolina is the object of this book, which consists of a series of detail plates with fifteen line-drawings of some of the work illustrated. A feature of value is that a date is affixed to each sample.

The various classes of interiors are grouped together, such as halls; stairhalls, stairways and balustrades; rooms such as dining-rooms, libraries, drawing-rooms, living-rooms, large rooms, music-rooms, bedrooms, kitchens, and such fixtures as chimney breasts, mantels, doorways, windows, and various details of ceilings, mantels, etc.

(*Continued on page* 70)



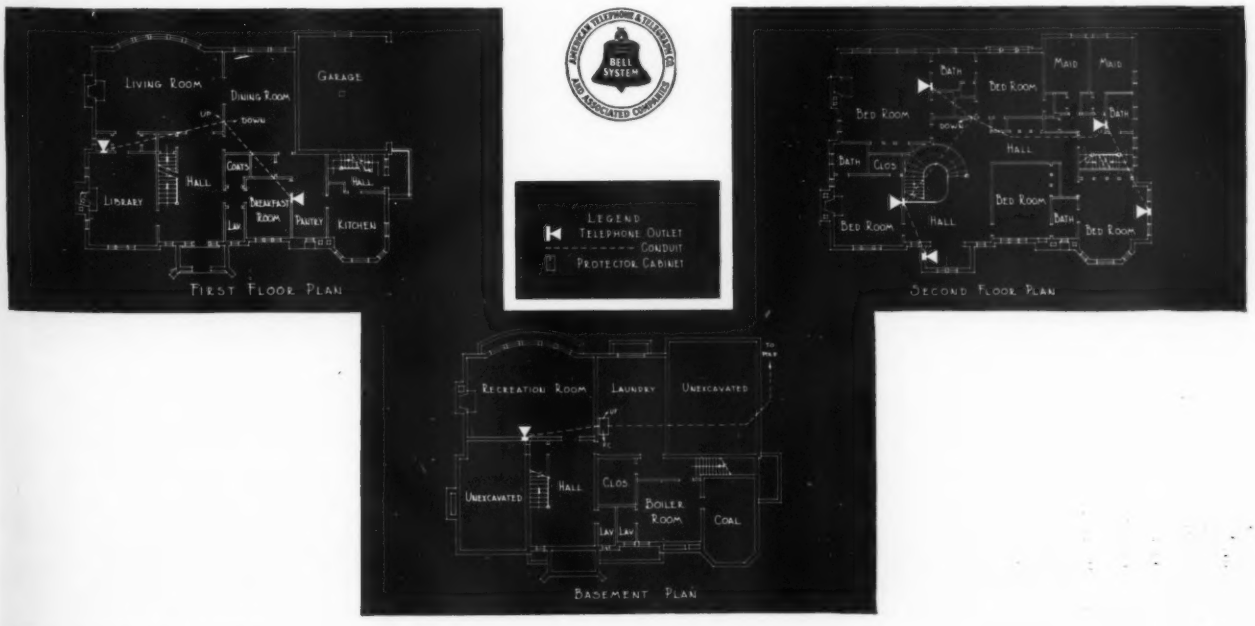
In the residence of Mr. Percy N. Calvert, 18040 South Woodland Road, Shaker Heights, Cleveland, Ohio, eight telephone outlets provide for modern telephone convenience. Here the telephone wiring is carried in conduit built into the walls and floors. MONROE E. DEANE, Architect. THE H. W. BROWN & SON COMPANY, Builders, *Cleveland.*

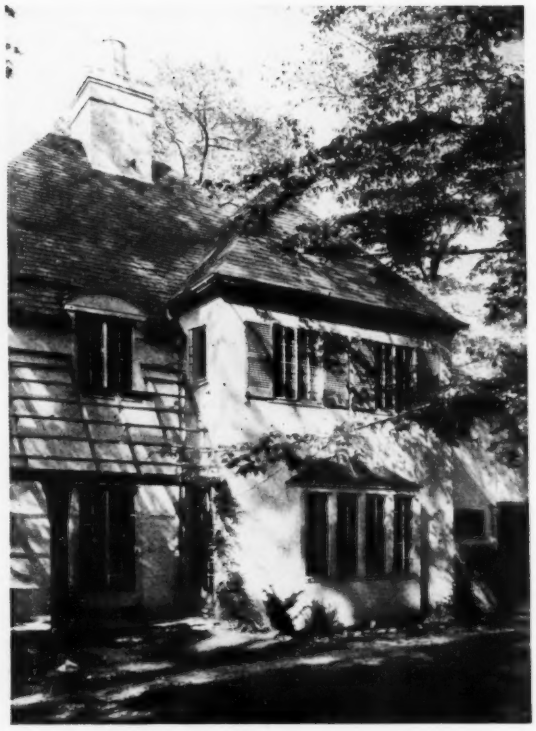
Flexibility is always Desirable in the Telephone arrangements of a Residence

IN PLANNING for the telephone arrangements of the houses they design, many architects include provision for more telephone outlets than the home owner may immediately require. This foresight insures a flexibility of service that often proves very desirable. When a residence is first occupied, telephones are needed in certain rooms. A change in the use of these or other rooms may involve the shifting of the telephone arrangements, and with outlets available at convenient locations, this rearrangement or expansion is easily accomplished.

Appropriate locations for telephone outlets can be determined in conjunction with the home owner, the architect and a representative of the local Bell Company. Conduit for the telephone wiring is then specified, and built into the walls and floors during construction. This results in improved appearance, and guards against certain types of service interruptions.

You and your clients are most cordially invited to consult with representatives of the local Bell Company in planning for the telephone arrangements for new and remodeled houses. No charge is made. Just call the Business Office.





House of W. L. Casper, Summit, N. J. Clark & Arms, architects. From "American Country Houses of Today: 1930"

American Country Houses of Today: 1930

By R. W. Sexton. Published by the Architectural Book Publishing Co., 108 West 46th Street, New York. Illustrated; 203 pages; size 9¾ x 12¾; price $12.50.

THIS is a fine collection of plates showing the recent work of forty-two of the leading domestic architects in all sections of the country. In each case the floor plans are given as well as frequent interiors or details of exteriors.

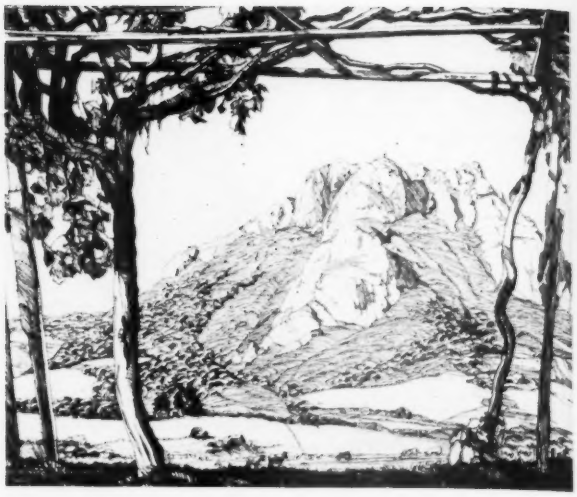
The selection of houses illustrated is well made, being better than in most books of this type. All in all, the book is one which architects doing domestic work will find to be an excellent addition to their libraries.

Aesthetic Judgment

By D. W. Prall. Published by Thomas Y. Crowell Company, New York. Illustrated; 378 pages: size, 6¼ x 9¼; price $4.

THE purpose of this book is to survey the field of aesthetics. As the author says, "I have treated aesthetic judgments as records of aesthetic experience, primarily as occurring in everyday life, by inquiring into the meaning of these records. I have distinguished the beauty of strictly aesthetic surface from the beauty of art, and analyzed the more narrowly aesthetic sensuous field in accordance with the usual division into auditory and visual elements."

The book includes chapters on the aesthetic surface of primitive life, the elements of aesthetic surface in general, the aesthetic materials of color, expressiveness in



Etching by Roi Partridge. From "Aesthetic Judgment"

nature, symbolism in art, and many other similar subjects. There are eighteen full page plates, three of which are in color. The author is a professor at the University of California.

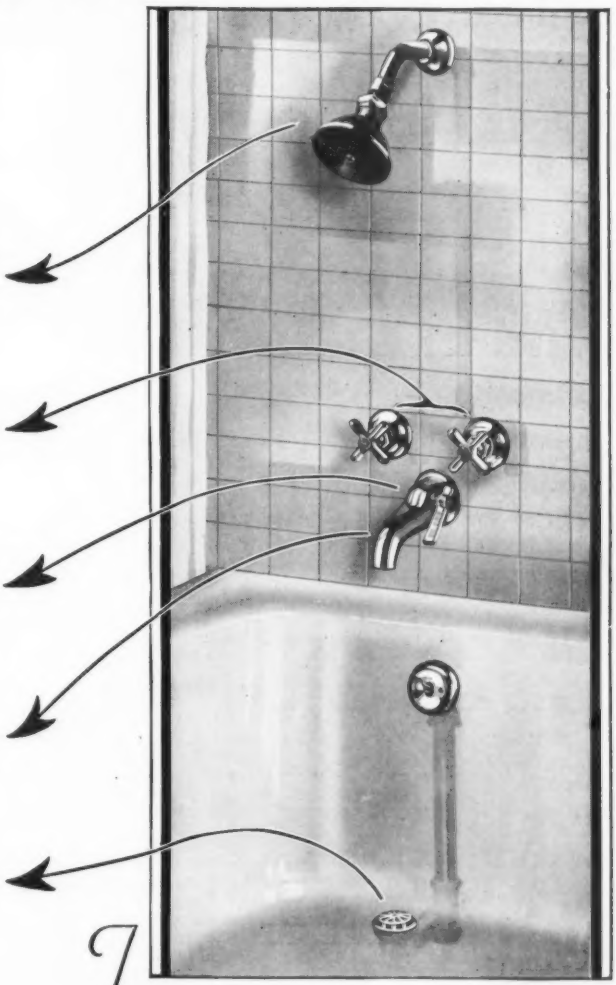
The Skyscraper

A Study of the Economic Height of Modern Office Buildings. By W. C. Clark and J. L. Kingston. Published by the American Institute of Steel Construction, Inc., New York. Illustrated; 164 pages; size 6¼ x 9¼. Price $2.

Perspective of 75 story building. From "The Skyscraper"

THIS is an extremely interesting study as to how high an office building should be, made by two able men, W. C. Clark, economist and vice-president of S. W. Straus & Co., and J. L. Kingston of Sloan & Robertson, architects. It assumes a site of a certain valuation and shows how a building with the largest possible return on the investment was finally designed. The various schemes considered are shown in detail, there being, for instance, a table showing the relative cost of excavations and foundations, structural steel, concrete floors and finish, roofing, etc., for the building when designed eight, fifteen, twenty-two, thirty, thirty-seven, fifty, sixty-three and seventy-five stories high. There is also a discussion (*Continued on page* 104)

5 FEATURES
that will interest architects specifying <u>new</u> bath fixtures



1. A new 4-inch cast brass shower head so constructed that none of the holes will stop up. Always 49 streams shooting in the right direction. Face plate removable by loosening center screw, which cannot fall out. Asbestos face plate washer. All-metal ball joint perfectly machined. No packing washer to break up and clog the holes in the head.

2. Only two valves, separate HOT and COLD, in the wall. Readily accessible from face of wall. Made with the standardized working unit that's renewed as easily as a light bulb. All wearing parts come out with the loosening of the cap. Seat made of Monel Metal.

3. Diverter valve in spout on wall—not in wall. All-metal—no rubber, no spring. Operates by water pressure and gravity. Shower bather tempers water at spout and lifts lever for shower. No accidental scalding. When shower bather shuts off HOT and COLD valves, diverter automatically returns to tub position. No unexpected showers.

4. A 1-piece fitting for 6-inch centers. Real adjustability for varying wall thicknesses. Only two valves, spout and shower to connect up.

5. A pop-up bath waste with the stopper in the outlet of the tub. No need to get at it from behind.

You'll find many other items of equal merit in our new 76-page catalog. Mail the coupon now.

The "MANHATTAN"

NEW

76 Page Catalog

Send me your new catalog and a few hints on the "Manhattan."

Name .....

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The CHICAGO FAUCET COMPANY
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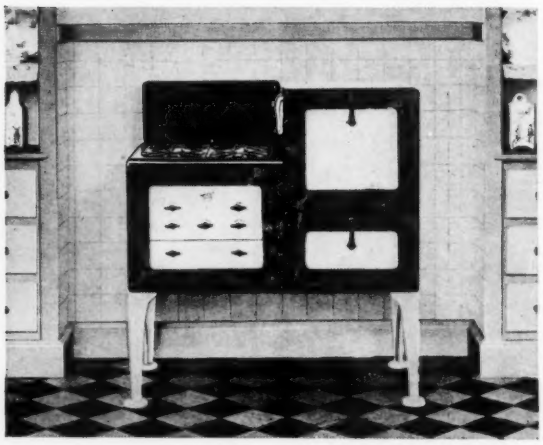
CHICAGO FAUCETS

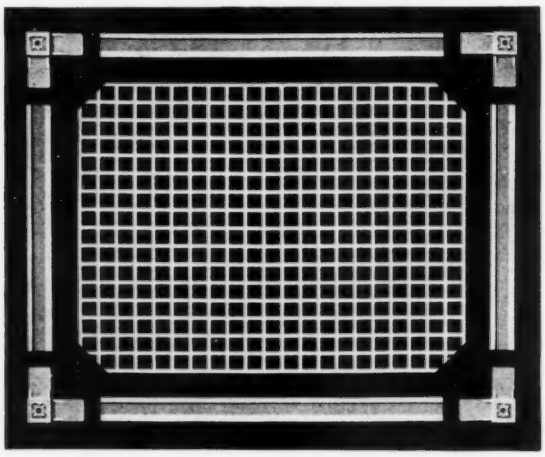
NEW MATERIALS & EQUIPMENT

BRIEF REVIEWS THAT MAKE IT EASY TO KEEP IN TOUCH WITH THE PROGRESS MADE BY PRODUCERS



Addition to "Magic Chef" Line

The Tiffin model of the "Magic Chef" line of gas stoves, made by the American Stove Company, New York, is a smaller stove made to sell for approximately $100. It is meant for locations where there is not the space for larger models. It is therefore well suited for apartments and other places where space is at a premium. It is 40¼" wide.



New Type Grille

Grilles of any dimensions can now be assembled from stock parts and shipped within forty-eight hours, according to an announcement made by the Harrington & King Perforating Co., Chicago, Ill. These grilles are built up from stock parts cut to fit as required so that there is no manufacturing delay. They are furnished in various designs and called "Gilframes."

Improved Webster Type "R" Steam Heating

Warren Webster & Co., Camden, N. J., announce an improved system of steam heating whereby the distribution of steam to each radiator is so equalized and balanced that all radiators get steam at the same time and in substantially the same proportion, regardless of distance from the boiler. It is stated that the system is particularly suited to light weight radiation and the newer fuels such as gas and oil. The main feature of the improved system is that a standard metering orifice is added in each radiator valve which makes possible even heating throughout the building.

Automatic Door Operator

An automatic door operator that opens and closes large doors by means of a push button switch, pull-string switch, or driveway switch is being marketed by the Schoelkopf Manufacturing Co., Madison, Wis. Operation is by means of pneumatic pressure from the regular source of electricity. The device is called "Air-lec" and is designed on the over dead center principle.

Frigidaire to Make Gas Refrigerators

A gas-fired refrigerator will be placed on the market this fall by the Frigidaire Corp., Detroit, Mich.

•

THE Division of Building and Housing, Bureau of Standards, Washington, D. C., has recently brought out a "Survey of Zoning Laws and Ordinances Adopted During 1928 and 1929," "Zoning Progress in the United States," "Survey of City Planning and Related Laws in 1929," and "Building Code Tabulation."

IN 1921, 12,500 houses in the United States were heated by oil burners. The total is now 535,000 and at the present rate of increase 65,000 domestic oil burners will be in use in 1931, according to a report issued by the American Oil Burner Association.

Open them—Close them
Without touching the Screens

Fenestra

STEEL
CASEMENTS
{SCREENED}

DETROIT STEEL PRODUCTS COMPANY, DETROIT, MICHIGAN

Rochester Society Uses Newspaper Advertising

(*Continued from page* 58)

offered us a contract under which the Society bought a space 2″ x 4″ in the Sunday paper for 26 weeks. We could have any matter printed in this space, but cuts were extra. By paying for this much space we were offered enough free space for an article about a column long with illustrations. The cuts for the illustrations were to be made by the newspaper at its own expense. The charge for the 2″ x 4″ space once a week for twenty-six weeks was $260.

To obtain this money we assessed every registered member of the Society $10 and asked for contributions from draftsmen, making the amount optional. It must here be confessed that the hardest part of our campaign has been collecting the money. Men who had voiced approval of the project and voted for it had to be run to earth and made to "stand and deliver." Promises of paying "next week" often were not kept. This is not a purely local condition and any organization contemplating a campaign of this sort will be well advised to put good money-getters on its committee. This situation is confirmed by the recent experience of "Pencil Points." It was flooded with letters of approval of a projected advertising scheme and then saw a disheartening ebbing of the enthusiastic tide when real financial considerations were forced. It rather points to this—that architects are not yet fully aware of the benefits, the power, and above all, the *need* for advertising. Or perhaps they look upon it as "just another contribution" instead of what it sometimes appears to be—a desperately necessary investment.

After collecting what we could over a period of several months, those members who had paid their share began to ask when the work was going to begin and eventually at a meeting of the Society it was voted to enter into the $260 contract with the newspaper, although at that time we had only $180 or thereabouts in the publicity fund. It was decided that if the balance was not forthcoming the amount necessary to fulfill the payment of the contract would be taken from the Society's treasury. Thus, the contract was signed.

There was a page in the newspaper we dealt with that was doing a great deal of harm in "modernization" work, advocating and actually achieving the metamorphosis of some of Western New York's old farm houses into "Spanish" or "Tudor" abortions. The paper published cheap designs, offered free advice, and generally achieved results that the cheapest of speculative builders would be ashamed to acknowledge. This is the page we selected on which to start work—not discouraging modernization, but urging a sympathetic and preservative kind of modernization carried out with the services of an architect.

Not a great deal could be hoped for from our 2″ x 4″ space, but our real work was done in the articles. In the paid space we first used different cuts with a short remark underneath. Lately we have been running one "reason" a week of "Ten Reasons for employing an Architect," taken from a leaflet which we prepared and distributed from our booth at the Building Exposition. No name of any individual or society appeared in this space. We merely made it a point to employ the word "architect" continually.

The paper was usually as good as its word in the matter of free space and published our article, which appeared under the name of the Rochester Society of Architects, weekly. It might be wise to mention that obtaining articles and illustrations from members of the Society was almost as difficult as obtaining the money. However, we have been able to publish one article a week, usually with illustrations, throughout the life of the contract.

The articles started with the correct principles of modernization and illustrations showed remodelling jobs executed by architects. We gradually moved into more general work and tried to touch on every phase of the profession, its principles and functions.

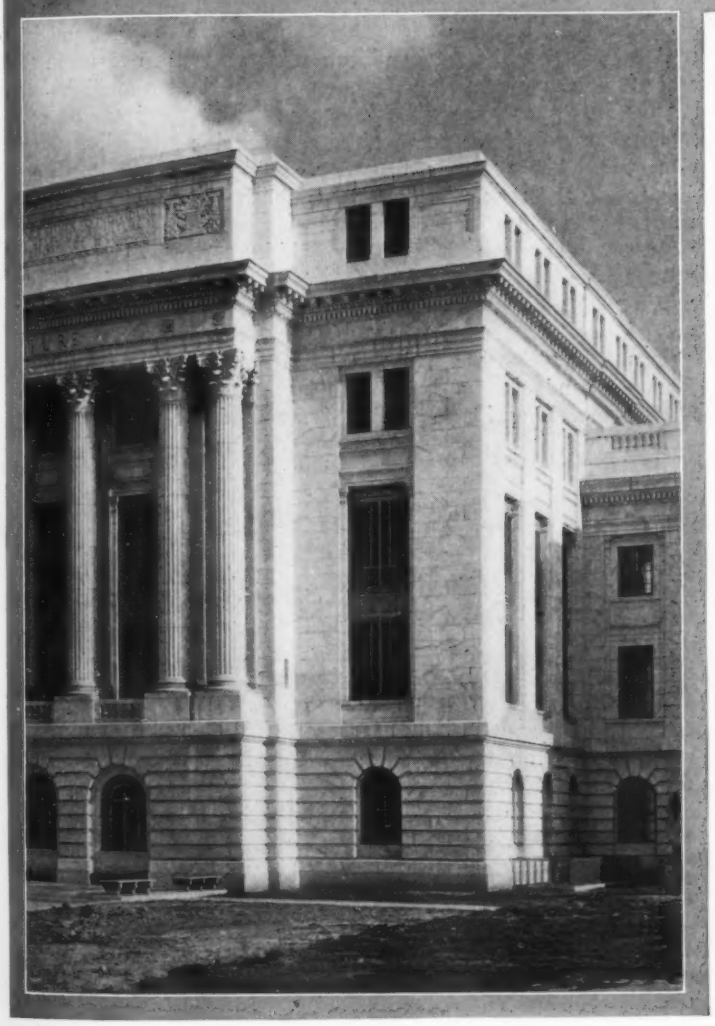
As to results, we cannot yet tell. For one thing, our effort has been infinitesimal from an advertising point of view, and for another there is absolutely no scale by which the effects of advertising can be measured. Believing in advertising as we do, however, we cannot but feel that we have been doing some good.

And now, a few words relative to dealings with the newspaper might prove helpful to those likely to make such contacts. It is unlikely that exactly similar conditions will exist in other places, but some of the circumstances we have met are bound to be met with elsewhere. We found it difficult to control material for publication once it had left our hands. Suppose, for instance, that the newspaper had agreed to give our advertisement a certain position and compose it in a certain way. Sunday comes and we find we have been allotted an entirely different position and that our copy is set up like any ordinary advertisement. So we protest several, no, many times—once is never enough—and eventually we get the right position and find a nice thick black line around our space with a wide white border (how the newspaper hates this!) between the black line and the neat little square of wording that we wanted. By this time we are convinced that the fine art of composing a printed set-up is lost so far as the newspaper is concerned. It may be because of the speed at which they work, or it may be that the sense of composition has been lost to compositors owing to the demands of those who wish to crowd every hairbreadth of advertising space with the printed word. By dint of hard pushing, a result something like what is desired may be obtained, but committees should not be surprised if one day they find that the type for their advertisement has been changed for no apparent reason and with no authority. You see, the newspapers are immovably convinced that they know the advertising business and are not yet won over to the architect's point of view.

As another example of our newspapers' attitude on the question of advertising a profession, architect copy writers are advised to write in the "language of the crowd." It is part of democracy's incontrovertible tendency to lower standards of refinement and if complied with it will be fatal to architectural advertising and give the opponents of such advertising justification for their present arguments. No great educational good has been

GEORGIA MARBLE

DEPARTMENT OF AGRICULTURE
Washington, D. C.



JAS. A. WETMORE, *Acting Supervising Architect*, Treasury Department
THE GEO. HYMAN CONSTRUCTION CO., *Builders*

BEAUTY *and* DURABILITY

THE use of Georgia Marble by the Government for one of its most important Department Buildings is sufficient evidence of its fitness for any building where beauty and durability are considerations. Only the new Administration Building in the centre of the group (close-up at left) is Georgia Marble.

Eight quarries operating both winter and summer insure uninterrupted deliveries.

THE GEORGIA MARBLE COMPANY · TATE · GEORGIA

1328 *Broadway*	814 *Bona Allen Bldg.*	648 *Builders' Bldg.*	622 *Construction Industries Bldg.*	1200 *Keith Bldg.*
NEW YORK	ATLANTA	CHICAGO	DALLAS	CLEVELAND

done by dispensing knowledge from the frigid heights known as the haunts of the highbrow. It is perfectly true that receptivity is killed by resentment when people are talked down to. But no educational good was ever done where dignity and authority were lacking and the "language of the crowd" is neither dignified nor authoritative. Also let our advertisements be written to avoid, at all costs, the average newswriter's fatuousness.

A committee dealing with a newspaper should have a thorough understanding with its representative to the effect that any cutting of articles or changing of headlines should be subject to the approval of the committee. Some of our articles have had their meanings changed by well-meaning editing, and in some cases they have been cut at the end of the preamble so that the reader was left in mid-air, as it were, wondering what came next. Then, in the matter of headlines, great care should be taken to word them so that they fit into a column width, because if they don't fit, the paper's substitution of words and meaning is apt to be wide of the mark.

THE fact is, the newspapers glean their material from every known source. They cannot be expected to have any but the most superficial knowledge of many of the subjects they print. Not knowing these subjects they can hardly be in sympathy with them and to obtain this sympathy is the thing that must be worked for. To do this the previous definite antagonism, owing to the profession's stand on publicity, must be overcome. The grounds for the authority of our statements must be shown to cure the feeling of a need to edit. And the papers must be convinced, on the technical side of advertising, that while they may be masters of the art of selling eggs or sauerkraut—even though those things require ugly publicity—the architects do know something about lettering, illustration and composition, and know the tone they wish their advertisements to convey. The architects are capable of creating such a set-up.

WE cannot deny that the newspapers are a great power for good or evil. By using them for publicity we can do a lot to raise the standard of taste and make the way smoother for the architect. Advertising in architecture should not be regarded merely, if at all, as a means of increasing business or selling a commodity. It should be regarded as part of the architect's sacred duty to disseminate his principles of belief in the fine and the beautiful. He should not be criticised if he uses the most efficient instruments provided by modern life to do this.

It is hoped that the difficulties met with have not been overstressed in this article. But forewarned is forearmed, and it is the unexpected assault that kills enthusiasm.

At last year's A. I. A. convention the sense of the meeting was asked on the question of paid publicity. Answer was made by the President to the effect that the Directors of the Institute felt that paid publicity destroyed its own object. This was taken to mean that the newspapers and other publications should be won over to give publicity to architects and architecture merely from an acquired appreciation on their own part and that the fact that they would publish practically anything they were paid to publish did not do much for the cause of architecture.

Through his efforts and ability Mr. Beers has obtained the sympathetic use of the newspaper in the interests of fine architecture. We are working for the same object, but since we cannot obtain the newspaper's free cooperation we feel that we are justified in putting our hands in our pockets and paying for the privilege of working for the good of the profession.

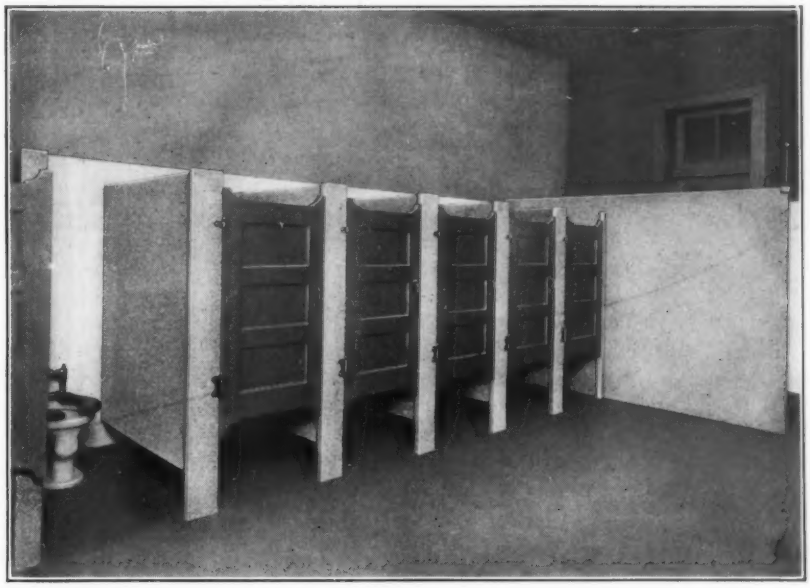
When Is Waste Space Wasted?

(*Continued from page* 51)

sliding doors and too shallow for other uses except possible pipe ducts.

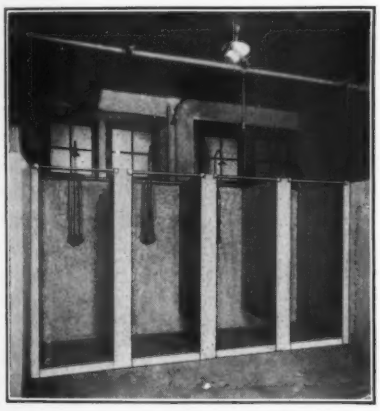
However, one should not forget that the floor area of a room does not finally determine the room's "efficiency." Its shape, the disposition of door and window openings, and its relation to other rooms, all have a bearing upon the room's fitness. No small house plan can be considered to have been "studied" unless at least one possible satisfactory disposition of the usual furniture has been provided for and indicated. This involves ramification into the disposition of heat registers or radiators, has a bearing upon the location of lighting fixtures, as well as upon the location and swing of doors, and requires constant study of changing types of equipment and furniture. All this is detail, it will be said. True; but it is the handling of such details that makes or mars the small house. To plan a small house without consideration of the disposition of furniture shows lack of understanding of the nature of the problem. Before he can be considered competent to design a successful five-room or six-room small house at a minimum cost, the designer should first live in one for a time.

In conclusion, what will the house look like? That problem cannot be solved on a calculating machine by a comparison of the percentages of half-timber, stucco, brick, and wood contained in several houses. That is the aesthetic aspect of the problem, an aspect which has but few, if any, rules for the designer's guidance. It is here that the architect and the engineer (unless miraculously they be one and the same person) part company. Generally, however, that house will look best which is best planned; but the best planned house will be one which is designed with the aesthetic as well as the practical considerations held constantly in mind. That is probably why so few architects concern themselves with the design of economical small houses—the $6,000 kind, on which THE AMERICAN ARCHITECT is seeking data. It is difficult—and unremunerative.



Suitable for Country Clubs and Schools—

permanent, sanitary, economical Alberene Stone



The use of 4-inch curbs is recommended as a safety measure.

A large shower compartment installation of Alberene Stone.

The major requirement for both shower compartments and toilet partitions is absolute sanitation and cleanliness. Alberene Stone, because of its close-grain density, is practically non-absorbent, which assures not only ease of cleaning and sanitation but long life. Being highly resistant to acids and alkalis, this Virginia soapstone can be said to be non-staining. Its use provides floors that are non-slipping—wet or dry. The natural light blue-grey color is pleasing and harmonious.

These qualities plus the structural soundness of Alberene compartments make for permanence and economy because there is no expense for upkeep or repairs.

Complete data and specifications are contained in our catalog which will be sent, gladly, on request.

ALBERENE STONE COMPANY, 153 West 23rd Street, New York
Branches: Boston Chicago Newark, N.J. Washington, D.C. Cleveland Pittsburgh Richmond Philadelphia Rochester
Quarries and Mills at Schuyler, Va.

ALBERENE STONE

TOILET PARTITIONS and SHOWER COMPARTMENTS

a house designed in the MODERN MANNER

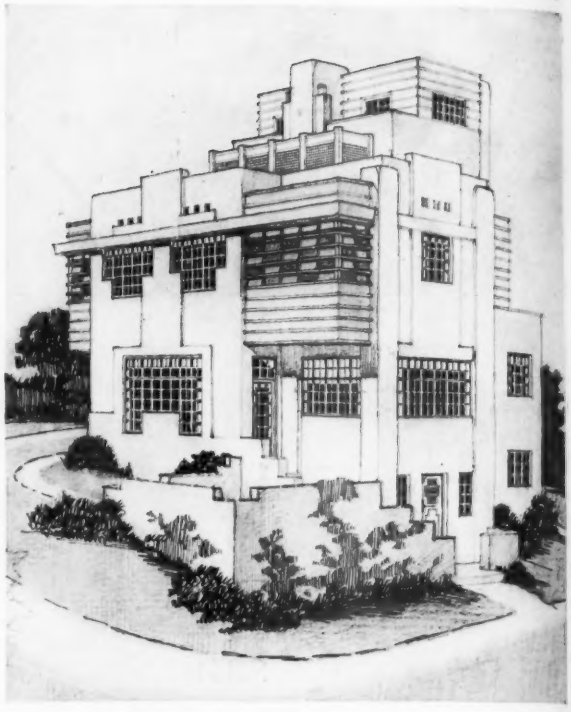
(*Continued from page 29*)

planning a modern house from the ground up, and seeing what forms are suggested by the requirements of today, by our latest methods of construction, and by building materials of our era.

At the outset let us admit that the residence illustrated here is neither the last word nor the ideal solution. Like all other houses, it is subject to the Ruskin school of criticism which says, "I-know-what-I-like," and stops there; but there is something shown in the perspective sketch of this house which may serve to suggest a reply to the Ruskinites. We refer to the automobile. If considerations of modern life, of practical requirements, and of the site, determined the logic of the plan of this house, then let us say that the aesthetic considerations which accept the automobile under the "I-know-what-I-like" criterion, determined the exterior.

The romanticists say a great deal about a house being a part of the landscape, and "tying-in" with Nature. They are perfectly right insofar as they are romanticists. Yet, they do not go around the country in one-horse shays or donkey-carts on the ground that these add more picturesqueness to the scenery than an upholstered coupé behind eight cylinders. Neither do they live in thatch-roofed huts or log cabins out of respect for the ideas of Thoreau. Instead they find some way either to rationalize or to ignore the seeming discrepancy between beauty and comfort until new ideas have had time to become aged in the wood; — and then, when this time has come, tradition appears beside each aesthetic concession to comfort, and the romantic school can again say, "I-like-it," because it has been made warm and friendly and "home-like" at last.

THE modern house shown in these illustrations has been planned for an owner who dares to be a pioneer, but it was not solely on account of his daring that this style suggested itself. The contour of the property itself had something to say about the plan; the treatment of the exterior was not definitely decided upon until the plan itself had dictated the modern manner as the only logical expression of these contours. Just how this was dictated may be explained only through revealing an architectural secret: — that nearly every house designed to "fit" one of the recognized traditional styles requires a certain amount of compromise in its planning, to allow for picturesque roof lines, gables or dormers, or for enclosed porches off the living-room or dining-room, which must necessarily cut off some of the light and air from these rooms. The few traditional style houses, whose roofing in no way compromises the plan, are those in which the eaves start entirely above the second floor ceiling and in which there is a huge attic containing an abundance of waste space or else with



unbearably hot rooms tucked away under the rafters.

These usual sacrifices in plan or in cubage are seldom noticed because we deceive ourselves into thinking they are assets, and because their acceptance has been sanctioned by custom. The tendency of modernism, however, is to accept nothing without question; and in residential design to plan nothing without reason. Given the fact that nearly every home-builder requires more floor area on the bedroom floor than either above or below, the logical answer is to make the second floor larger than the first, letting the rooms "over-hang" where necessary and thereby provide shade and weather-protection for the windows below. Given the fact that porches and terraces are for fresh-air, comfort, and a view of the surrounding country, logic places them on flat roofs above the second floor and thereby uses a portion of the house formerly fifty per cent ornamental.

The objection to the flat roof in the past, was that it could not provide sufficient insulation against the weather in northern climates;—though in Spain, Italy, Mexico, and the tropics, no such objection could exist and tradition even demanded flat roofs. Yet, even in the north, do we not to-day observe flat roofs on practically all city buildings, even including city houses; and have not modern methods of construction sufficiently demonstrated that these have no practical objection, and no fault except that they are not more often taken advantage of, for use as terraces?

Let us once accept the flat roof and make use of it, and let us fearlessly accept the necessity for making the second floor larger than first, and then let us study our contour map and our plan requirements, and see what result is dictated by logic and available materials.

A first glance at the first floor and plot plan reproduced here, shows the private road winding entirely around the south side of the house to the garage. This was necessitated by the slope of the land toward the east or right-hand side of the (*Continued on page 80*)

Water Gate for M. J. Meehan, Lake Mahopac, N. Y.

"Metal Work by FISKE"

THE natural beauty of the M. J. Meehan estate at Lake Mahopac, N. Y. is further enhanced by the decorative iron work shown in the views above.

Garden Gate *Armand R. Tibbitts, Landscape Architect*

FISKE offers to landscape architects a complete advisory service and over 70 years of experience in executing ornamental metal work of every variety.

FISKE artists and master craftsmen work closely with landscape architects, carrying through from pencil plan to metal every detail of the architect's original conception. Write for illustrated folder of ornamental metal work.

J.W.Fiske IRON WORKS
80 Park Place ~ New York
ESTABLISHED 1858

SPECIALISTS IN ORNAMENTAL METAL WORK

drawing; the site is nearly all solid rock, making a garage under the house impracticable, so it was decided to follow the land contour with the approach road and to locate the garage at the extreme north end, using its roof as a children's playporch but planning it to allow a later addition of chauffeur's quarters accessible either through the pantry entrance and a staircase, or through the children's room closet on the second floor, remodeled into a passage from the rear hall. The location of the garage to the north, allowed south, east, and west exposures for all remaining rooms, an important consideration in any house but particularly so in this one since the view toward the south is over Larchmont Harbor and Long Island Sound.

The slope of the land allowed the living-room floor to be set four steps down from the foyer and remainder of the first floor, thus giving this room a high ceiling and an interesting fireplace treatment. The chimney was located in the exact center of the house, and made to serve the kitchen as well as the fireplace and the heater flues. The chimney is not only made a feature on the exterior tower treatment but also serves to give privacy to the two maids' rooms and their terraces which are on the top floor.

THE living room is designed to have modern built-in furniture, and the windows are stepped up around these to fit the furniture design. Since the porches found in traditional houses are in this case eliminated from the first floor, the usual library has been made into a room serving four purposes at once; — it is not only a sun porch and card room as marked on the plan and as indicated by its high windows on three exposures; it is also a library, with built-in bookcases over the sofa shown at the left wall, and is lastly a breakfast room with a door leading directly off the kitchen. This door is referred to by the owner as a "cocktail door," as may be inferred by its close proximity to two small closets and to the steps down into the living-room where the modernist guests assemble to await dinner.

While they are having appetizers, let us proceed to the dining-room. To those familiar with the modern interior it will be noticeable that the foyer and stair-hall have been designed for treatment in the modern manner, with walls placed at a forty-five degree angle and with a built-in seat at the first two steps of the stairs. There is also a passage from the garage, for use in rainy weather, but shown on the plan as blocked off by a drop-leaf shelf used as a serving-table between pantry and dining-room. The remainder of the first floor plan explains itself, so we will proceed hastily upstairs while the owner and his guests are in the dining-room.

The principal feature of the second floor is the suite comprising the owner's room and bath, all of which has been planned to give the utmost expression to modern comfort and the furnishings of to-day. Many of us who have visited the exhibitions at Macy's, Lord and Taylor's, the American Designers' Gallery, and the Metropolitan, have wondered how and where rooms could be found in which to fit furniture and fixtures shown in these displays. The owner of this house wondered too, until he decided to have a room and bath planned for this style of decoration and equipment.

Now, as we stand at the bedroom door, we can see two notes on the plan; two notes which never appeared on a plan before; — one of them says "Husband," the other "Wife," and together they say harmony and privacy in the dressing-room and bath. We will not intrude too long upon this privacy, but instead will look through the other rooms.

It will be noted that the children's room has a maximum of exposure, but that there is no direct draft onto the beds. These too are built in, as are all those on this floor, and have toy closets behind them. The main clothes closet is at the rear wall, and the bureau and tables are below the special windows on the west wall. A word must be said about these windows, for upon them depends a great deal of the convenience of this type of house, as well as the appearance of the exterior.

CERTAIN of the second floor windows are shown in solid black on the perspective sketch, particularly those in the children's dressing-room, and the dressing-room for the owner's wife. These windows are stepped up, like most of the others, to fit in with the built-in furniture and to give light where it is most needed. They are composed of unit panes measuring about one foot high by two feet wide, made to slide horizontally in metal grooves. There is thus obtained a maximum of air control, since it is possible to open each pane independently of the others or even to slide each pane to a half or quarter-open position. The sliding portions are made of heavy plate-glass with a groove cut in each side to give a grip for the fingers. The screens are of course the new rolling type operated just like a shade, and are entirely on the inside of the room, protected from the weather. There is nothing to interfere with shades, curtains, or drapes, and nothing to swing into the room or out into the rain.

Looking at these windows we have naturally gone outside to see the exterior of the house, so let us observe a few other features of the design before we continue upstairs to the tower. It will be seen that there are no gutters or leaders. Those who have been content to accept tradition in their homes have also had to accept gutters and leaders as a necessary evil. Water-stains, leaks, and repair-bills were also accepted, since the neighbors had them too; and the unthinking romance of eclecticism whispered that so did the houses of old England and old France . . . gutters and leaders to keep out the rain, and awnings to keep out the sun. Modern logic asks why we should not combine the two with a horizontal band-course over the windows of the second floor, and with deep over-hangs over certain ones on the first floor where the sun is strongest to the south and west. Frank Lloyd Wright first found the value of these overhangs in some of his Chicago houses, but they were cornices only and not entire rooms or parts of rooms; — probably only because Wright was already twenty-five years ahead of his time and dared not go any further.

NOW, going back into the house, we shall proceed up the main stairs to the third floor, and out onto the screened porch. It is another room which has too many uses to be content with one label. It is primarily made to serve as the owner's porch and to be used as the afternoon-room of the mistress of the house. But on occasion it is planned to be used as a sleeping-porch or a spare room, and is directly accessible to the third floor bath across the stair-hall. (*Continued on page* 84)

No. 5 of a series illustrating: "Thoughtful decorative hints to help the architect."

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THIS man's work never seemed to end at five o'clock. The wife (and who could blame her?) objected to being an overtime widow. A new home was being planned. The architect had a clever idea—perhaps if the husband had a cheery, comfortable place in this new home where he could really get some work done evenings, . . . Why not? And a cozy, homey room resulted, a room which possibly, and very likely, influenced the client's attitude toward the whole job.

Modern architects appreciate the value of decorative suggestion beyond the essentially structural effects. They know that decorative suggestions such as this go far toward influencing the client in their favor. Furthermore, the assurance of adequate decoration makes certain that the architect's work will appear to best advantage.

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It is equally accessible to the service stairs, for such times as tea or something stronger is desired, and it opens up onto the main tiled terrace roof and the view over the harbor. All of this space is that which would be called merely "attic" in the home of a conservative, and would be given over to the trunks that hold the secrets of the past and the romance of memories;—or the memories of romance.

On the fourth floor are two maids' rooms and a bath, and in front of each maids' room is a small terrace also looking out over the view toward the south. The angle of vision from the main terrace is such that neither owner nor servant can see each other, yet each has an unobstructed view of the harbor. The maids are not tucked away under hot attic dormers but have what might be called the best rooms in the house, — were it not for having to climb three flights of stairs to get to them, instead of the traditional two.

The modern house must of course be built of modern materials, and the logical form of construction for a house such as this is concrete. The main walls are finished in a light buff color and certain features of the exterior are picked out in a slightly darker buff. Such a scheme carried out over the entire facade, however, would be monotonous, so the overhanging portions and the parts shown with horizontal bands are built of cypress boards, stained a rich brown made frankly to look as "woody" as possible for contrast. So far so good; there has been nothing daring nor shocking in this color scheme, to make it "modern." But wait a moment, we are not through. . . .

Having gone this far conservatively, we need not now hesitate to venture a peacock blue for the steel casement windows, and to trim them with burnt-orange drapes and valances on the inside. We need not hesitate to grow plenty of vines and plant a number of bushes around the base of the house and the flagstone terrace below, for fear the green will clash with roofs, blinds, or awnings; for green belongs here as nowhere else, and it is nature's own finishing touch to our building. We omitted it purposely, for her to paint in, "with brushes of comet's hair," and we are certain that it will be as acceptable to the modern house of to-day as it was to the modern house of other days.

Here, then, is our residence in the modern manner, presented just as it was designed for the Larchmont site. It is by no means the ideal solution for modernism any more than it is the last word. It is shown merely as a step, and one toward the bottom of the flight; only the flight is not one of fancy but rather one of time, and the time is only just beginning. The American house is bound to change its exterior appearance just as sure as it is changing its interior and its equipment, its materials, construction, and usage; just as sure as we ourselves are changing. Those of us who judge by the "I-like-it" standard alone, are also bound to change, and will like the comfortable and the logical as much as we now like only the traditional and the romantic. If we of to-day are mechanistic in spirit, the time is not far distant when we will also have become mechanistic in our taste. When that day does come, "modernism" will no longer be considered a name only, but will be known as a style, and by whatever name it is called, will be here to stay.

Sometimes I'm Glad I'm an Architect

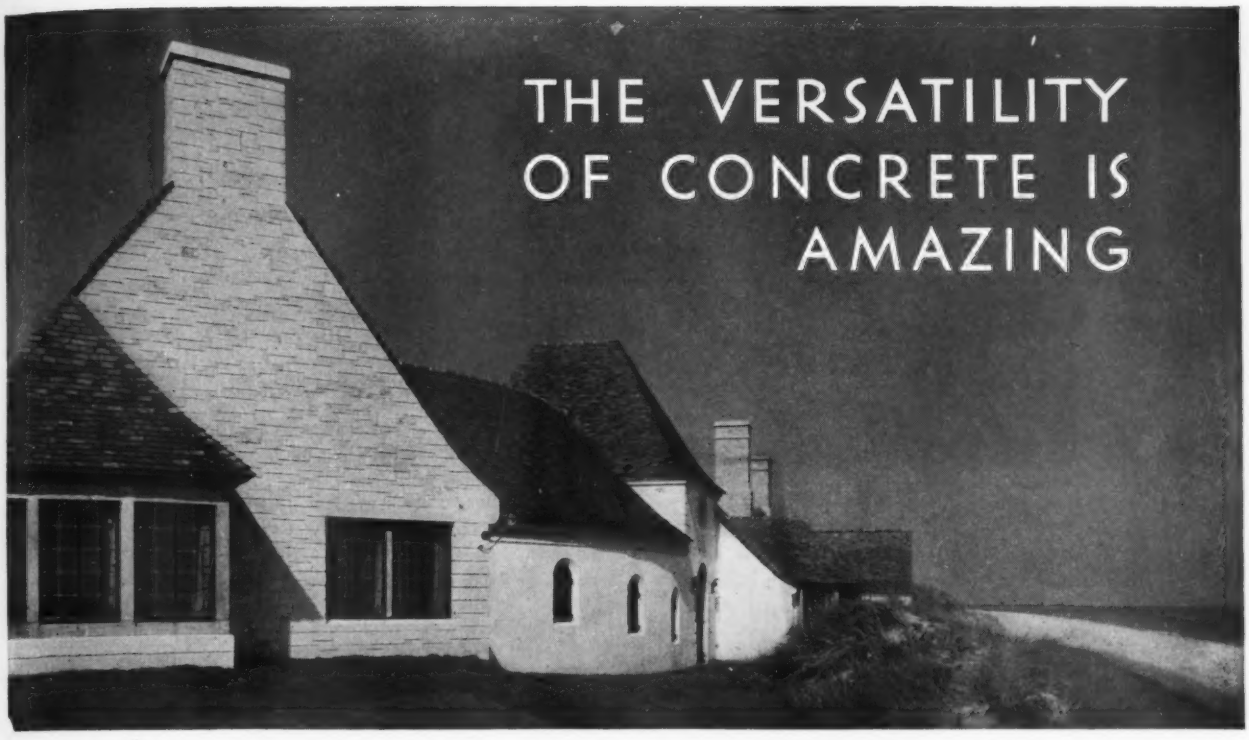
(*Continued from page* 49)

tone: One, Two, Three, Four, and we reflect that we have three more hours to go, and wonder if we will get to sleep. And then the second one tunes in with a louder note: ONE, TWO, THREE, FOUR, and we wonder why it is so bold and suppose it is because it has a brass face. And then the big one starts, the one with the mahogany case and the inlays, and you can sense that it isn't bawling the others out, or anything like that, but it just wants them to know that it is ONE, TWO, THREE, FOUR. And after that they seem to calm down, and they begin to tick to each other in whispers and we think that perhaps the fellow who made the mattress wasn't a moron at all; and the next thing we know the sun is shining in through the windows and it seems that the clocks were all wrong, and it is twenty minutes past seven. And then our wife comes in and says we should get up and we promise that we will attend to the matter at once. But we wait awhile and think it would be nice if we could meet the man who made the mattress and give him a bonus or something. And our wife comes in again and says, "Daddy, you must get up," and we say, "Stop annoying us"; then the little clock says, "One, two, three, four, five, six, seven, eight," and you ought to see how very quickly we now manage to shave.

We get so discouraged designing houses we sometimes think we will throw up the whole business and do schools instead. All you have to do is get some friendly Board to trust you with the first one and after that, they come easier. And before you know where you are, you are a specialist and make pots of money. We are not sure how many, but we know it's a lot. The catch is finding the friendly Board.

This sounds like a somber story and we don't want it to end up like one of the Wessex tales. Every story should have a happy ending, so here goes.

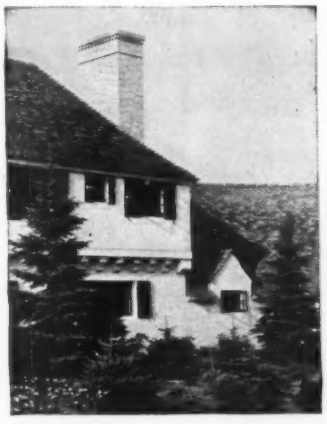
Once we were stalking a client, when another one ran out of the bushes. We caught him and he gave us the job. Later on he asked us what our fee would be and we cast our eyes down and said, "Six per cent." He looked astonished and said, "Wait a minute, we don't want to economize on architectural service, we want lots of it." So we agreed that we would leave the matter open. And his wife designed the house, and did it very well. We just made the drawings. She gave us all the credit, and they both put up a battle over our final bill and said it should be more. Sometimes we are glad that we are an architect.



The summer home of Mr. William F. Ladd, Southampton, Long Island, N. Y. Peabody, Wilson & Brown, Architects.

OCCASIONALLY, in our travels, we come upon a home which seems to have been designed and built in complete accord with the setting nature has provided. One of these overlooks the ocean from the sandy slopes at Southampton, Long Island. Its lines are free from restraint —a quality which extends even to the material of which it is built.

Portland cement concrete was chosen because, of all durable and firesafe materials, it was most easily available. Also, it afforded the architect a versatile material with which to vary the wall treatments in harmony with the design. Whether the surface was to be curved or flat, rough or smooth, patterned or plain, colored or "natural", concrete was easily fashioned and tinted to the precise requirements.



Exposed to the full force of ocean storms, these rigid, impenetrable walls of concrete are a constant safeguard against damage and consequent repair costs.

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What Architects Are Talking About

(*Continued from page* 57)

lecturer and author of several books on domestic economy. "The sinks of the private houses and all the waste pipes from baths and kitchens are connected by large pipes to a central factory. This plant is situated several miles out of the town. In a few minutes, every day, by aspiration, the whole garbage of the city is removed and taken care of. This marvellous system, invented several years ago by a French engineer, M. Gaudillon, is perfect not only because it is sanitary but also because it is economically efficient. Two men only are needed for a city of 18,000 people."

THE most beautiful long-span bridge built in the United States during 1929 is the Mount Hope Bridge across Mount Hope Bay between Bristol and Portsmouth, R. I. according to the annual award of the American Institute of Steel Construction. It was designed by Robinson & Steinman, engineers, New York. The most beautiful short-span bridge, according to the same award, is the Mount Pleasant Bridge, constructed over the Harlem Division of the New York Central Railroad at Mt. Pleasant, N. Y. It was designed by Jay Downer, chief engineer for the Westchester County Park Commission. The jury making the awards consisted of three architects, Arthur Loomis Harmon, Hugh Ferriss, and Philip A. Cusachs; two engineers, Gustav Lindenthal and William H. Burr; and Dr. J. Horace McFarland, president of the Pennsylvania Art Commission.

A BUILDING shipped by mail, is the subject of one of Ripley's recent "Believe it or Not," which states: "The Bank of Vernal, in Uintah Basin, Utah, was constructed of brick shipped from the plant piecemeal by parcel post. The town is situated sixty-five miles, across two mountain ranges, from the nearest railroad, and by some curious combination of circumstances it was found that, while the cost of shipping the brick by freight or express was prohibitive, it was much more reasonable to ship each brick wrapped in paper by parcel post."

OFFICERS of the Architects & Engineers Square Club, New York City, have been elected for the coming year as follows: Fred Sutton, president; Herbert Anderson, first vice-president; John H. Harris, second vice-president; George A. Rogers, treasurer; Edward Augustine, corresponding secretary; Charles F. Kennel, recording secretary; Martin Hansen and Edwin Hayner, chaplains; Casper Buechner, sergeant at arms; and David B. Emerson, marshal.

GENERAL ELECTRIC workers will be taken care of during unemployment periods according to a plan announced by that company. Each worker or participant in the plan pays one per cent of his earnings into a fund, the company putting in an equal amount; in times of unemployment, those employed would contribute to the support of those laid off, the company, in this case, contributing the same amount as its workers.

ABOUT six months after money rates begin to relax, building commences to expand. This is the experience of the American Radiator and Standard Sanitary Corporation. According to this, since the credit ease started last October, an increase in construction is now past due.

THE twenty-third Paris Prize in Architecture of the Society of Beaux-Arts Architects has been awarded to L. B. Anderson of the Massachusetts Institute of Technology. The design of George Brenan of the same college was chosen for second place. (*Continued on page* 90)

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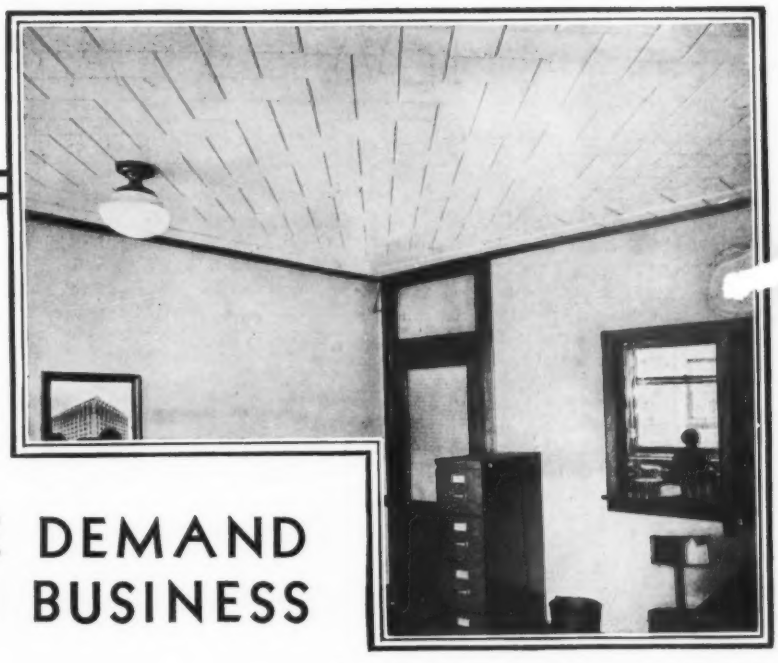

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18 . . . Booklet containing samples of various types of metal lath with descriptions. Also loose leaf sheets describing metal lath construction for better plastering and stucco, as approved by the Associated Metal Lath Manufacturers and the American Specification Institute, which is accompanied by pictures and drawings showing proper methods of construction for suspended ceilings, partitions, stucco on old and new work, etc. Issued by the North Western Expanded Metal Co., Chicago.

AMERICAN WALNUT FOR INTERIOR WOODWORK AND PANELING

19 . . . Booklet containing pictures of interiors in which American walnut was used, issued by the American Walnut Manufacturers' Association, 616 South Michigan Avenue, Chicago. Has articles on the value of good interior trim, the cost of woodwork, specifications of a specimen room, the figure in walnut, walnut finishes, walnut floors, properties of various cabinetwoods compared with walnut, etc.

LYT-ALL, THE UNIVERSAL WALL COATING,

20 . . . Booklet issued by Pratt & Lambert, Inc., New York City. Contains a color card of the various pastel colors in which this flat wall paint comes, explains how to get stippled finishes, tells about allied products and gives specifications and directions for interior painting.

TRIBUTES IN BRONZE

21 . . . Booklet illustrating and describing various memorial and commemorative tablets. Issued by the Ellison Bronze Co., Jamestown, N. Y.

ZONE HEATING, WITH SIMPLIFIED OFFICE DISTRIBUTION AND ELECTRICAL REMOTE CONTROL

22 . . . Booklet issued by Webster Talmadge & Co., 50 Church Street, New York City. Describes the Talmadge system of heating, which individually operates radiators at various sides of a room according to the temperature or infiltration at these points. Diagrams show how proper distribution and heat may be obtained in buildings of various types and gives examples of savings effected by this type of system. Contains illustrations of buildings in which installed and plans showing operation of equipment.

STRUCTURAL GYPSUM SPECIFICATIONS

23 . . . Booklet issued by the Structural Gypsum Corp., Linden, N. J. Four different booklets covering specifications and details of design and construction for Gypsteel pre-cast long-span roofs, short-span roofs, floors and ceilings, and partition tile. Illustrated with construction pictures and drawings and tables. A.I.A. file no. 4 k 1 and 10 a 3.

HEATILATOR FIREPLACE UNIT

24 . . . Folder illustrating and describing this fireplace unit, which also increases heat from fireplace, issued by the Heatilator Company, Syracuse, N. Y. A.I.A. file 14 e 2 .

REGISTER GRILLES

25 . . . Illustrated booklet on registers and grilles made by the Auer Register Co., Cleveland. Shows various types of grilles and registers, gives prices, sizes and suggestions on installation. A.I.A. file 30 e.

ELEVATOR SIGNALS

26 . . . Catalog A-57 of the Richards-Wilcox Mfg. Company, Aurora, Ill. Illustrates and describes various flashlight annunciators, passenger signal fixtures, dials, push button plates, signal controllers, etc. A.I.A. file 33 h.

ROBERTSON INCISED PLANATILE

27 . . . Booklet with illustrations in colors as well as in black and white showing the incised tile of the Robertson Tile Company, Morrisville, Pa.

HOW TO PAINT CONCRETE AND MASONRY SURFACES

28 . . . Illustrated booklet of the Medusa Portland Cement Co., Cleveland. Tells how to paint concrete and masonry surfaces with Medusa Portland cement paint. Explains why walls deteriorate, why many paints peel or chip, painting wet walls, protection of joints. A.I.A. file 25 c 2.

STEEL JOISTS

29 . . . Kalmantruss steel joists are now available in a new series conforming to the recommended standards of the Steel Joist Institute; this booklet contains complete design data for the new joists together with information on Kalman fire safe construction. Illustrates and describes various steel joist accessories. Issued by the Kalman Steel Company, Chicago. A.I.A. file 13.

METAL LATH HANDBOOK

30 . . . Booklet illustrating and describing the various types of metal lath made by the Genfire Steel Company, Youngstown, Ohio, and explaining for what purpose each type is best suited. Also has specifications and details of construction where metal lath is used for various types of work and in connection with various materials. A.I.A. file 20 b 1.

ARCHITECTURE OF THE NIGHT

31 . . . A series of articles by Raymond Hood, Harvey Wiley Corbett, George L. Rapp, and Walter D'Arcy Ryan, published by the General Electric Company, Schenectady, N. Y., to suggest the possibilities of the night illumination of buildings. A.I.A. file 31 f 24.

TERRA COTTA STORES AND STORE FRONTS

32 . . . Booklet illustrating and describing various store fronts or store buildings in which terra cotta has been used. Published by the National Terra Cotta Society, New York City. A.I.A. file 9.

TERRA COTTA BUILDINGS FOR FLOOD LIGHTING

33 . . . Booklet illustrating and describing the night illumination of buildings faced with terra cotta. Published by the National Terra Cotta Society, New York. A.I.A. file 9.

DUMB WAITERS, ELEVATORS, LIFTS

34 . . . Booklet illustrating and describing the various types of ball bearing equipment made by John W. Kiesling & Son, Inc., Brooklyn, N. Y.

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• PERSONALS •

VICTOR A. MATTESON, A.I.A., has moved his office to suite 1407, Civic Opera Building, 20 North Wacker Drive, Chicago, Ill.

FREDERIC C. KLAWITER has resigned from the firm of Martin Tullgren & Sons Company, architects, and will enter private practice at 2077 Fairmount Avenue, St. Paul.

MILTON M. FRIEDMAN, architect, has moved his offices to suite 635 Rives-Strong Building, 112 West Ninth Street, Los Angeles, Cal.

JOSEPH HALSTEAD ROBERTS, architect, has completed a studio building for his own use at 501 Termino Avenue, Long Beach, Cal. Mr. Roberts is secretary of the Architectural Club of Long Beach.

LOUIS KURTZ is no longer connected with the architectural office of W. Stanwood Phillips, Inc., New York City.

• COMPETITIONS •

A remodeling competition is being conducted by the Railroad Cooperative Building and Loan Association, 441 Lexington Ave., New York City. Anyone who has recently remodeled a house is invited to compete. There will be a first prize of $100, with second and third prizes of $50 and $25, and five other prizes of $5 each.

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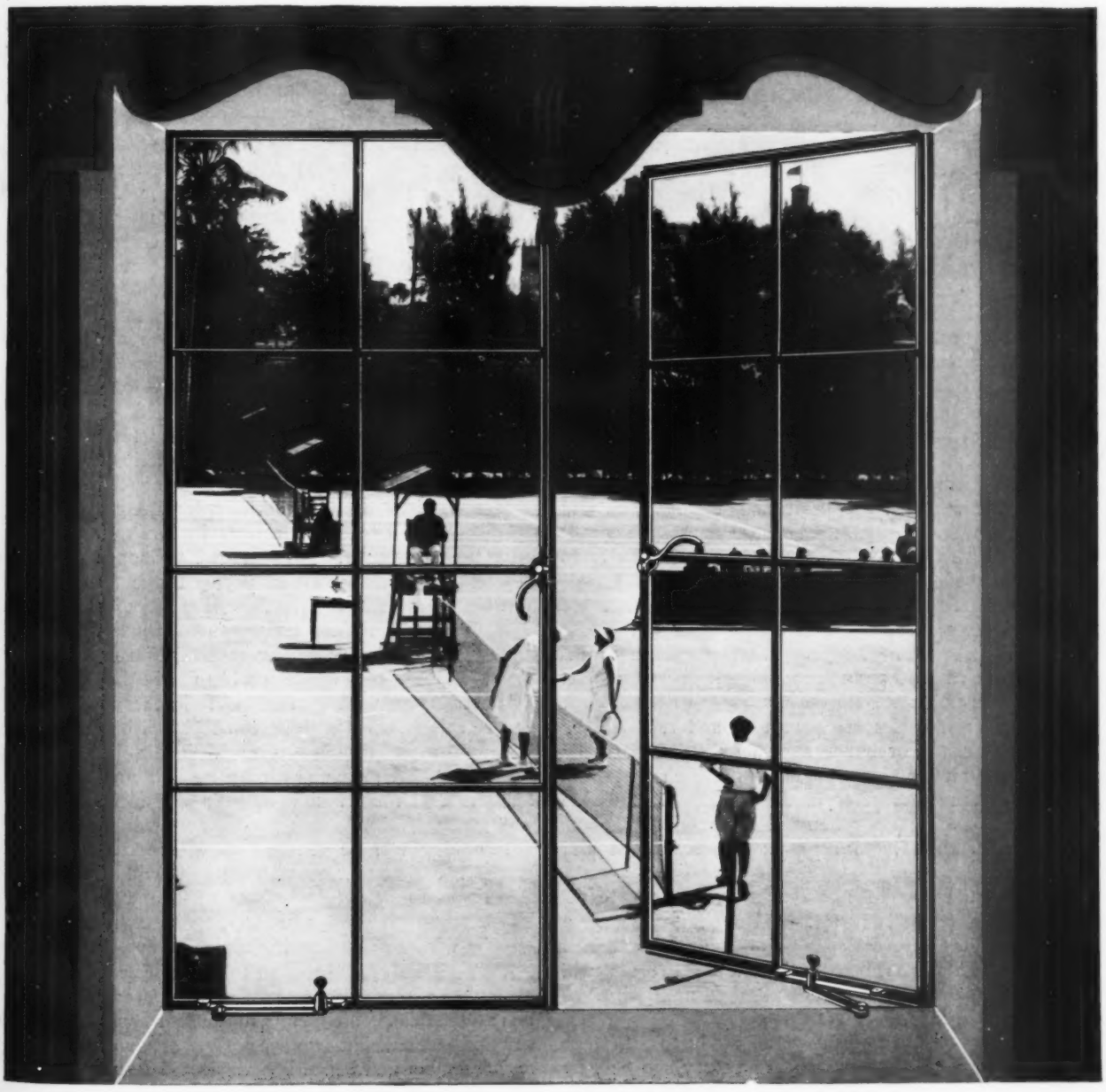
flat drawn
WINDOW GLASS



As They May Build in 1975

(*Continued from page* 55)

been semi-assembled in the shop will be placed and simultaneously the forms and towers will be ready to receive concrete.

Freight planes or dirigibles will pick up cement in Pennsylvania, rock in Jersey or Westchester and sand in Long Island, mix it en route and when moored, down shoots the mixed concrete to runways which will distribute it as desired. This concrete will set up in six hours and steel will follow.

This skeleton of the structure may arrive via truck or by air. We will assume that it comes by truck. Cranes will bristle from the top of our towers of sufficient length to set steel in any location. Magnetic cable lines will hoist loads to their predetermined place. This will do away with all raising of derricks and allow the steel erection to go on without interruption. Welders will follow the steel erection and blow guns will coat the steel immediately with a thin coating of fireproofing of mineral composition. The steel's composition will insure freedom from oxidation, its strength will have been doubled so that the skeleton of a thirty-story building will look much like a present frame of a twelve story structure. Ease in making connections due to sure-fire methods of welding will make it possible to support any architectural detail needed at little extra expense. Greater spans will naturally result in giving the designer more leeway in fenestration and the planner more freedom in his layout. Large area without columns will be more easily achieved as specially strong steel will be available for these girders and consequently no great loss in height will be necessary.

The cubic foot weight of the entire structure will be one half of its present weight. Bays will be braced diagonally for stiffness and wind bracing to a greater extent than at present.

Walls will no longer be of any consideration in the matter of stiffness. Their only function will be to keep out the weather, fire protection, to look well and to stay that way. I'm sure we will achieve such a wall in four or five inches of thickness. We use twelve to sixteen inch walls of heat and cold conducting materials where we need only a blanket to keep out weather.

Manual labor on the job at the present time must boost our cost out of all proportions to those in industries which have become mechanized. For example, just in placing steel we see the multitude of hand-work involved. Hoist cables are placed around the steel by hand and loosened by hand. The derrick is turned by hand. Two men find the housing for each piece, set and put in the bolts after much banging with sledge hammers. All rivets are handled three or four times and heated with a hand bellows; tossed, caught and placed by hand. Even the riveter is hand-directed.

Slabs for floors will be of quick-setting concrete reinforced with very strong steel and ought to be only a few inches thick with cork blown on ceilings for sound insulation. This cement delivered from the air will chute down the tower to the floor desired and into place without human help.

Exterior wall slabs will arrive all ready to set, story by story, fitting on to the steel of one story and held by the next. These slabs will be faced with manufactured stone, asbestos or metal and will have a core of highly soundproof and heat and cold resistant material. Integrally on the inside there will be a smooth plaster-like surface. At present, asbestos might answer the requirements of such a material, but its cost is now high. Recent discoveries have been made showing that clay can be baked into large slabs. Perhaps methods for building up clay, cork and gypsum may be achieved. The exterior finish in such a slab must be capable of a variety of expressions in texture and color. The non-rust chrome alloy steels may prove possible in conjunction with mineral wool, cork and plaster, all made into one self-contained slab. Partitions would be of similar material but with both sides alike.

While plastering is going on, I can imagine the ship staying at her mooring and mixing and sending the plaster down through pipes and hoses to many floors simultaneously where it is blown on the walls. A floor could be done in a day and a large building completed within a week. Experiments will achieve plaster with a minimum amount of water for evaporation therein, so that the time for drying will be short.

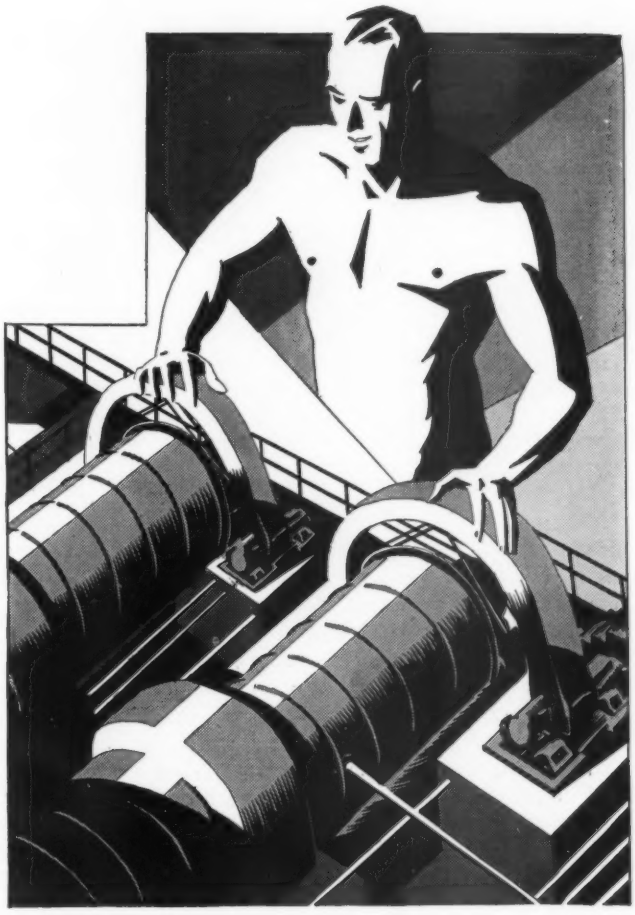
One who has visited a modern pottery plant and knows how the liquid clay is piped for blocks around the building, can see that such a method is not far out of sight for our work. Next might come the airship loaded with paints of various colors premixed, again using the pipes and hoses for application.

The mechanical equipment I will only touch on lightly as that has advanced far ahead of the materials and processes used in the heavy construction. It needs less thought at present in order to keep a balanced equality between our structure and our mechanical equipment. Just as our sciences have developed far faster than our politics and religion, so have the mechanical works in a building far out-distanced the structure itself.

Heating will be done entirely by electricity coming from concealed built-in elements located to work along with the ventilation. All windows will open and close automatically, integrally a part of the heating and ventilating system, so as to provide air of the desired freshness, humidity and temperature throughout summer and winter. Wall losses or transmission will be very small and so the whole problem will be simplified. Double glazing with heat elements in the windows will reduce this loss. Heat bills will be small because of the little waste and accurate control. The ventilating system will cool the summer air before it is admitted to the building and the window controls will make it impossible and undesirable to manually open windows.

Plumbing will be grouped about the control towers or shafts and complete bathroom units will arrive on the job ready to be set by means of a few connections. These units will include fixtures, wainscot, floor fittings, electric wiring and plumbing piping.

There is no great problem to solve in order to arrive at such an assembly, certainly nothing comparable to an automobile. Neither will such a solution mean standardization, but simpy complete shop fabrication and assembly and hence less work will need to be done



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on the job. The large organizations that have to do with building will plan, route and install these just as they now do a piece of steel.

Electricity direct from the source of natural power will illuminate, heat and furnish power to our buildings at a low cost. Either lights will be invented that function on high voltage or transformers will be installed as frequently as we now install panel boards, thus eliminating the waste of transmitting on low voltage, which is now common practice.

Elements now consist of wires or filaments. I picture whole surfaces as low intensity elements of the future, enabling us to furnish light from the entire ceiling or panel, that is soft and diffused. Rheostats will be part of every switch enabling us to increase or decrease the light intensity without the necessity of turning other lights on or off.

Roofs will soon become the most used part of our building and hence will be more carefully planned and finished. They will have in addition to the mooring mast, landing spaces for planes, hangars, pent-houses, playgrounds for children and recreation spaces for adults. They will be landscaped as we now plan a suburban garden. Cities viewed from the air will appear as green as the country except that the streets will interrupt with shadows. Architects will detail roofs with the same care now given to the front door.

This whole conception forecasts that the architects and builders will expend more effort and time planning their work and less time getting them built. Two months should be the maximum time needed for building, but the planning and preparation of drawings will take as long as is now customary. More work will be required of architects and their organizations must be developed to the point where all items are foretold in their exact relations to all others; no sloppy designs can be turned over to the contractors to be set right by shop drawings. Designs will have to be carried to their ultimate conclusions so that shop drawings will not be required as corrections for ignorance or carelessness but only as fabricating plans.

Thus a structure may be erected in one quarter of the time now allowed, using one half the material and such material of one half the weight per cubic foot of present materials. This all should do much to diminish the cubic foot price of the completed buiding. Added to this, the operating cost of such buildings will be less on account of small fuel bills, and less depreciation will result on account of longer life before the building becomes obsolete. Wide column spacing will allow greater flexibility of use.

If this picture holds true, families of four now using four rooms may for the same rent have eight rooms. We will be able to arrange our offices so that some quiet, some privacy and more convenience will result. One will be able to stretch without knocking over his next neighbor's typewriter.

Such a condition will perhaps slow life down to a reasonable tempo and allow humans to achieve a moderate amount of comfort.

Why Not Call It a Stone House?

(*Continued from page* 39)

types of buildings, from the smallest houses to the tallest skyscrapers, insisted that their architects' designs bear sufficient period influence to permit them to announce to the world that their houses and buildings were designed "in the style of" the Colonial, the Romanesque, the English or the Spanish, as the case might be.

And so the architectural profession today finds it necessary to talk "style" to its clients. And the peculiar part of it is that people, the masses, the man in the street, if you will, does not know the first thing about the styles, although it is his favorite word. He has been led to believe that he will be considered ignorant if he does not make free use of that word when talking about buildings and their design. So he reads up on the subject, enough to become familiar with the various names, at least, and goes forth unafraid.

And now to my point. I claim that if we are to sell architecture to the man in the street, we should not word our sales talk in a language that he does not understand. Describe your design to a client in words with which he is perfectly familiar. Point out to him how it reflects the purpose to which the building is to be put; how the design of the house harmonizes with the site; how the details are governed by the materials employed. Forget the "styles."

And I really mean to forget them as "styles." For you will admit that the manner in which history has recorded the architecture of the past is somewhat absurd. Each style is associated with some king or queen and is said to have begun with his or her accession to the throne and ended with the termination of that sovereign's reign. Thus we speak of the architecture peculiar to the early part of the seventeenth century in England as the Tudor style, not because the Tudor kings and queens had anything to do with its development, but merely because it is supposed that during the greater part of its duration—the throne of England was occupied by a sovereign of the House of Tudor.

Why not scrap all the names by which we record styles and periods today? That sounds like the talk of a radical, you will say. It does. My idea is based on the theory that style in architecture is determined by structure. I would classify all architecture according to construction and forget entirely any connection it may now have, or seem to have, with the crowned heads of Europe or a definite historical era. There would be stone architecture, brick architecture, half timber architecture, wood architecture, and so on. A greater part of the architecture that we now designate as the Tudor style would be grouped under half-timber architecture. And so would the half-timber architecture that we find in France, which is now listed under an entirely different heading and bears the name of a French monarch.

In other words, I would (*Continued on page* 96)

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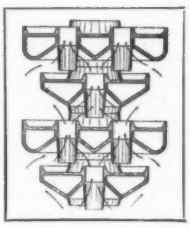
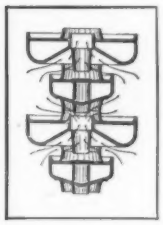
A Humidifier that *really* humidifies

Here is diagram of the Humidifier for hot water systems.





This diagram shows the arrangement of sections and air circulation of the Humidifier for steam and vapor.

$150 to $225, f. o. b. factory, installation extra, in beautiful metal cabinet. Other models in period wood cabinets. Supplied also for recessing in wall. Types and sizes for any house that is heated by steam, hot water or vapor.

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Why Not Call It a Stone House?

(*Continued from page* 94)

group under one head all buildings of every type constructed of half-timber, adding the name of the country and the year as reference. Similarly, all brick buildings would be listed together. Certain buildings which we now designate as Georgian, as of England in the seventeenth century, and others to which we now attach the ambiguous title of Colonial, would be listed under the same head as of America in the eighteenth century. Included also in this group would be a skyscraper, perhaps, which we now choose to call "modern," as an example of brick architecture in America in the early twentieth century. For if architecture is developed on the basis of the old established principles, we can account for a certain resemblance in detail between the design of a two-story brick house and a forty-story office building, but there is no reason for a stone house being in any way similar to one of wood. Then why put the stone house in the same group as the wood house simply because it happened to have been built during the reign of a certain king?

There are several very good reasons for this idea of scrapping the styles.

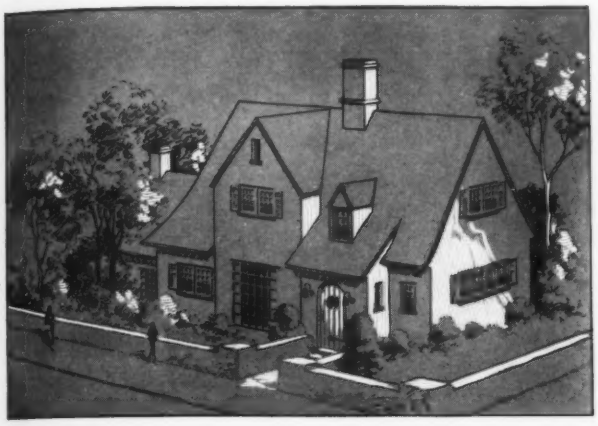
In the first place it must be admitted that by being obliged to design our buildings so that they suggest decided influence of some one of the old styles and periods, our architectural progress is hindered and practically all opportunity for the expression of creative ability is lost.

Then, too, by attaching such importance to the "style" of the design, we are naturally led to overlook the fact that design is developed from structure. In other words, we go about the solving of our problems backwards. Instead of determining on material first, and developing the design logically from the construction, we establish the design first and attain the desired "period influence" as best we can in the material employed.

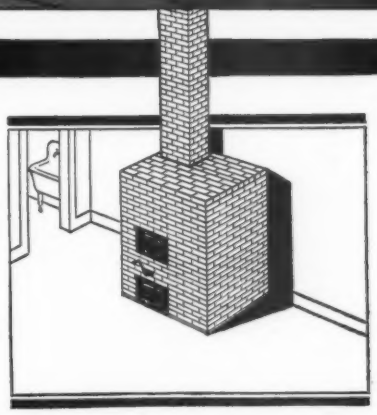
BUT I find that the greatest benefit to be derived from this idea is that it will open the eyes of the clients to understand that architects know more about the design of a building than they do. When your conversation with a client centers on "style," the client puts you in a class with a tailor. He tells you to build him a house from a certain "pattern." You have no opportunity for originality and less chance to interpret in terms of architecture your client's individuality.

So let us avoid associating every building we design today with some past period of architectural history. Your client knows the difference between stone and brick, and between wood and stucco. Talk to him, then, in terms of materials. If you want to get some inspiration from the past or to give your client some idea of what a stone building, for example, may look like, show him some buildings that have been built of stone in various countries throughout the ages. Impress upon him that the only similarity that your design can bear to some old one is due to the fact that your building and the old one are both constructed of stone. If he wants to say that his building bears the influence of some design developed by a sixteenth century English architect, well and good. But do not let him give any

Which is modern?



——a look in the basement will tell



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Sound Transmission

(*Continued from page* 35)

more work should be done along this line.

If masonry can be used the foregoing suggests along what lines one should proceed to obtain a wall with a fairly high degree of sound insulation. If the construction must be entirely of wood we find the suggestions of little value, as it is not practical to increase materially either the stiffness or the mass of the studs. Outside of using a very weak plaster, apparently the only thing to do is to build a double wall using staggered studs. This has been tried in the laboratory, but the results were rather disappointing. Possibly this was because the opening in the laboratory for the test panel allowed the use of only a seven foot stud, which is quite a little shorter than what would normally be used. As the studs must be tied together at the top and bottom by a common plate a large portion of the energy may be transferred in this manner. If the energy is transferred through the plate better results would probably be obtained (when staggered studs are used) by using a stud which is not so stiff. Also the longer the stud the better the results. The two sides should not be identical. This would prevent the transfer of energy by sympathetic vibrations.

As a whole it appears at the present time as if it were impossible to improve radically the sound insulation of a wooden structure.

UP to the present time the discussion has been entirely of air-borne noises. When dealing with floor structures another type of noise, which sometimes is termed impact noise, must also be taken into consideration. This type of noise includes every case where the vibration is transmitted directly to the structure instead of to the air first and then to the structure. Examples of this are noises from machinery on a floor overhead, a shot dropped on the floor, vibrations from a piano which are partly carried down the legs of the piano to the floor, etc. The transmission of the sound in this case does not obey the laws that have been stated for air-borne noises. For instance, a heavy concrete or masonry slab which would be a fairly good sound insulator for air-borne noises is found to be of practically no value as a sound insulator for this type of noise. In the laboratory it was found

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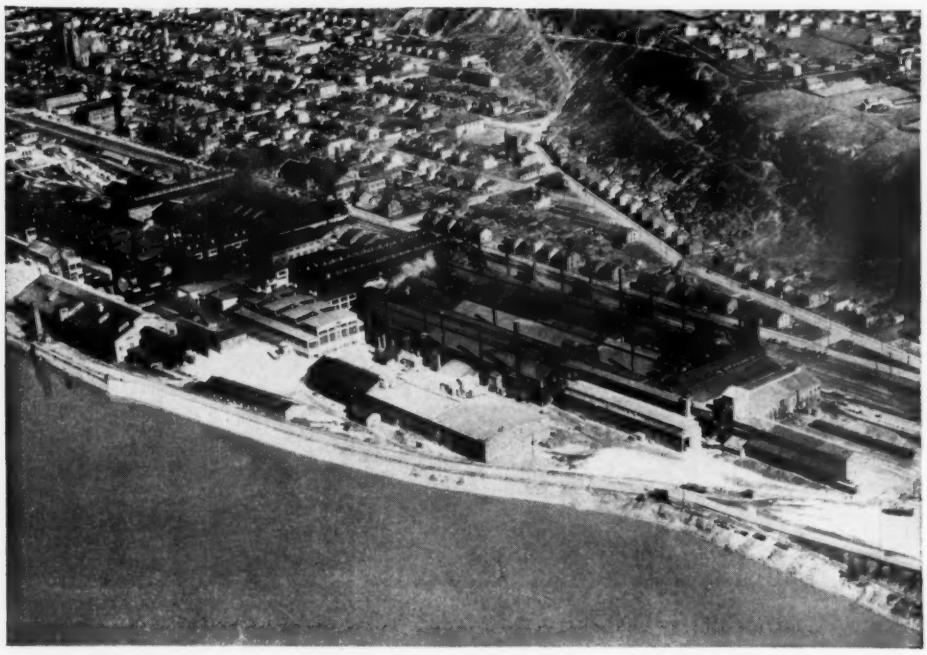

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that a floor of this type which reduced the air-borne sounds 55 units reduced impact noises less than 2 units.

A special machine was developed for the purpose of measuring the transmission of such noises. The essential part consists of 5 small weights which are raised by cams and then allowed to fall. A motor drives this at the rate of about 5 blows per second.

A FEW different types of structures have been tested in this manner and a few conclusions drawn. A wood structure does not transmit impact noises as readily as masonry. A masonry slab is almost a perfect transmitter of impact noises. To secure any degree of insulation against this type of noise the floor should be built in layers, especially in fireproof construction. A good plan is to use a suspended ceiling placed on the under side of the slab and a floating floor on top. Also some precautions must be taken in the building of this suspended ceiling and floating floor. The suspended ceiling should not be suspended with iron rods which are rigidly attached to the masonry and bolted to the steel channels supporting the ceiling. Unless a special construction is used it is probable that tying the ceiling to the masonry above with heavy wire is the best method. The floating floor should also be attached to the masonry at as few points as possible.

This term "sound-proof" unfortunately has a variety of meanings. Generally it means that given the conditions under which the room or building is used no sounds are heard coming through the walls, floors or ceilings. Accepting this definition of the term, will the same structure always be considered sound-proof? It is evident at once that it will not, for noises which are heard coming through the walls or ceiling of a room depend upon two other factors besides the structure. They are the loudness of the noise coming through and the loudness of other noises present in the room.

When other noises are present the effect is the same as if the threshold of hearing is shifted upward. In what is generally termed a quiet room this masking or deafening may raise the threshold of hearing to as much as 5 or 10 decibels, and in a quiet office to 10 or 20 decibels. In a large busy room like a department store, the increase may be as much as 30 decibels. In a room with a number of telegraph sounders or typewriters this level might be raised to 50 decibels while in a wood shop where there is machinery it might be as much as 70 decibels. This change of level is illustrated in Fig. 2.

SUPPOSE we have a room in which the average sound reduction factor is 40 decibels, that is, the loudness of a sound in passing through this structure is reduced 40 decibels. If our neighbors in the adjoining apartment were very loud talkers or had a radio which was quite loud we could not hear any of their noise if our room were as noisy as the wood shop or the telegraph office mentioned above, but we could hear it if our room were not any noiser than the department store.

If they were talking in an ordinary tone of voice we could not hear them if our room was as noisy as the department store if it was like a quiet office we could.

The above is given simply as an illustration, and the values assigned may not apply for any given case, but it does show the factors which should be known when a structure is designed if satisfaction is to be obtained.

Unfortunately there is not enough definite informa-

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tion as to the loudness of the various noises which may be encountered. Some measurements of this type have been made by the Bell Telephone Research Laboratories, but more work should be done along this line.

Also there is some doubt as to whether the reduction factors which have been measured in the laboratory will hold exactly in larger partitions. To try to answer this question, a portable set similar to that used in the laboratory has been developed for making measurements on buildings. Measurements can not be made quite as accurately with this equipment as with the laboratory set up, but the reduction factor can be determined correctly within two or three decibels.

CONCLUSIONS: Methods and equipment have been developed for making satisfactory sound transmission measurements and a large number of laboratory measurements made on various types of structures. These measurements indicate that satisfactory sound insulation can be obtained but to eliminate some of the present guesswork and put the job of designing sound-proof structures on a scientific basis check measurements of sound transmission should be made on walls and floors in buildings. Also the range of intensities for various noises should be determined. When these factors are all determined then an architect can specify the proper kind of structure in order to obtain satisfactory sound insulation on any job.

• BOOKS •

(Continued from page 70)

of the net rentable area by floors, absorption of floor areas by elevators, annual operating expenses per square foot computed on net rentable area.

In addition to this valuable data, there are chapters devoted to the discussion raging about the skyscraper, such as traffic congestion, public safety, health, light, and various other phases. All in all, the book is one which every architect interested in large building operations should study.

• • •

NINETY-SIX per cent of the population of Manhattan Island lives in apartments; eight per cent of the population of Chicago lives in apartments. This indicates the trend of living conditions in cities, which tendency is typical of cities throughout the United States, according to a study recently completed by Halsey, Stuart & Co. Contracts for apartment houses have increased in eight years from about $464,494,000 in 1921 to about $1,189,258,000 in 1929.

A national record of early American architecture is being compiled in the library of Congress and about five thousand negatives have already been promised or received. The American Institute of Architects is seeking the cooperation of its various chapters and the general public to help build up the collection. A subdivision of the Division of Fine Arts will serve as national pictorial archives of early American architecture, the Carnegie Corporation having made a grant permitting the negatives to be catalogued and filed.

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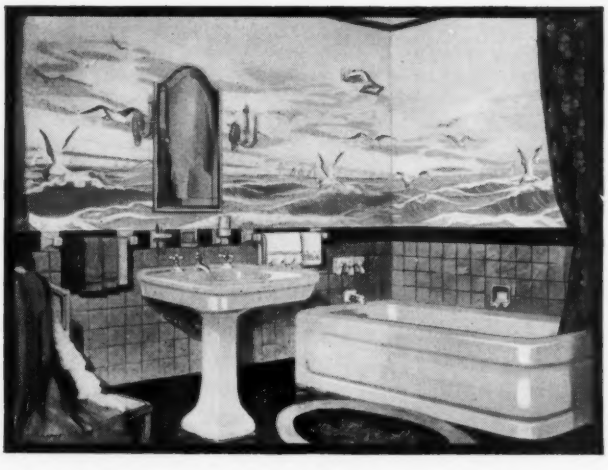

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Tennessee Chapter Employs an Advertising Agency

(*Continued from page* 23)

Through the activities of the Committee on Public Information of the Institute much has been accomplished. We have used, and expect to continue to use, the information so generously furnished us through the Chairman of this Committee of the Institute and in a dignified manner we hope to convey, through the medium of an active newspaper advertising campaign, the information that will accomplish that which we desire.

Some surprise may be expressed by the statement that contributions will be solicited from the building trades and allied interests. Without due consideration this may appear to be wrong in principle, but, in the first place, donations will be voluntary and accepted without personal influence or pressure being used. Then, too, we expect in our advertising campaign to stress the position the contractor occupies in the construction of buildings, how materials are purchased and furnished, and the wisdom of using discretion in the selection of building appliances. Due to his training, an architect can and does use materials which would find a limited market without his vision, and there seems no reason why any plan which will increase the employment of architects in connection with building operations should not rebound to the interests of all branches of the building industry. If this be true, a fair proportion of the expense should be assumed by those whose interests are so closely interwoven with ours.

WE see, or think we see, great possibilities in the plan which I have outlined. We believe that this work has been too long delayed and yet we assume this is no reason why it should not be carried forward with enthusiastic but careful planning, not as an experiment but with the definite objective of increasing the employment of architects in connection with every building enterprise. We expect to state facts which are well known to all the members of the profession and yet little understood by the public. We hope to combat those interests antagonistic to our own by likewise confining our statements to the truth. We aim to do all this by a consistent, logical and dignified advertising campaign through paid advertising in newspapers, interesting articles on architecture and building to be published consecutively, and some direct mailing.

We are not blind to the Herculean task which lies before us nor do we expect immediate results. We do believe that the present generation of architects will profits through our efforts and, last but not least, we will in a measure have discharged the obligation we owe to our age and future generations.

Manifestly it is a difficult undertaking to place before those who have but little concern with our problems matters in which we are so deeply engrossed. Yet if we do not undertake these duties we cannot expect others to do the task for us, nor can we shirk the responsibilities which we owe without paying the penalty. When it is possible, as it seems to us it is, to gain the ends desired without sacrificing dignity or lowering the standing of the profession, it does look as if we should put our shoulders to the wheel and by unity of action tackle the job. This is what the Tennessee Chapter proposes to do.

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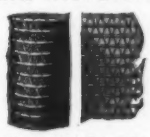

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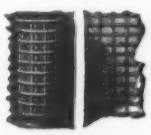

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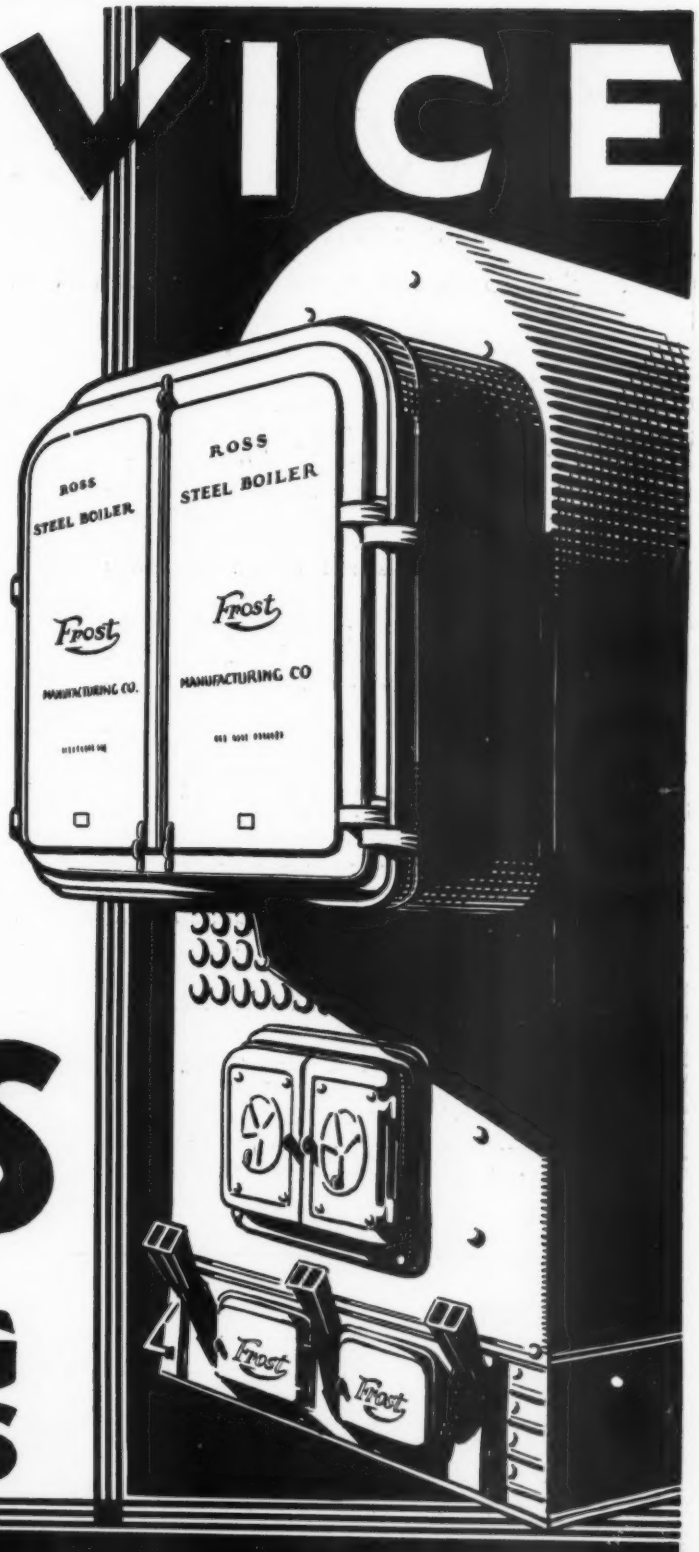

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The Readers Have a Word to Say

(*Continued from page* 66)

than interesting in its many manifestations as decoration and design but it seems, in its present state, suitable to smaller and specific purposes only.

And I am sorry also to say that if the pages of THE AMERICAN ARCHITECT are correct, the impressions of the larger architectural firms throughout the country seem to suffer from the same astigmatic vision. There is a school of painting in which impression is paramount and in which form is only discerned from a distance. This may do quite well for painting and small pieces, but certainly in the monumental it should not be a controlling or even dominant factor; the lives of the people are too closely associated with the buildings they work in, live in and pass by.

I see very little criticism in your magazine; is it unethical to do so? It is true criticism that is the best guide to the novice and should invigorate those who have become stylistic; standards, to reverse the axiom of the children, should not be seen but heard.

These are but a *few* of the thoughts of a layman who has to *see* the work of your architects.—*R. W. Voorhees, The American Book Co., New York City.*